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SURFACE WATER SUPPLY OF CANADA
ARCTIC AND WESTERN
HUDSON BAY DRAINAGE

AND MISSISSIPPI DRAINAGE IN CANADA

IN

British Columbia • Alberta
Saskatchewan • Manitoba
The Northwest Territories
and Western Ontario

Water Year 1957-58

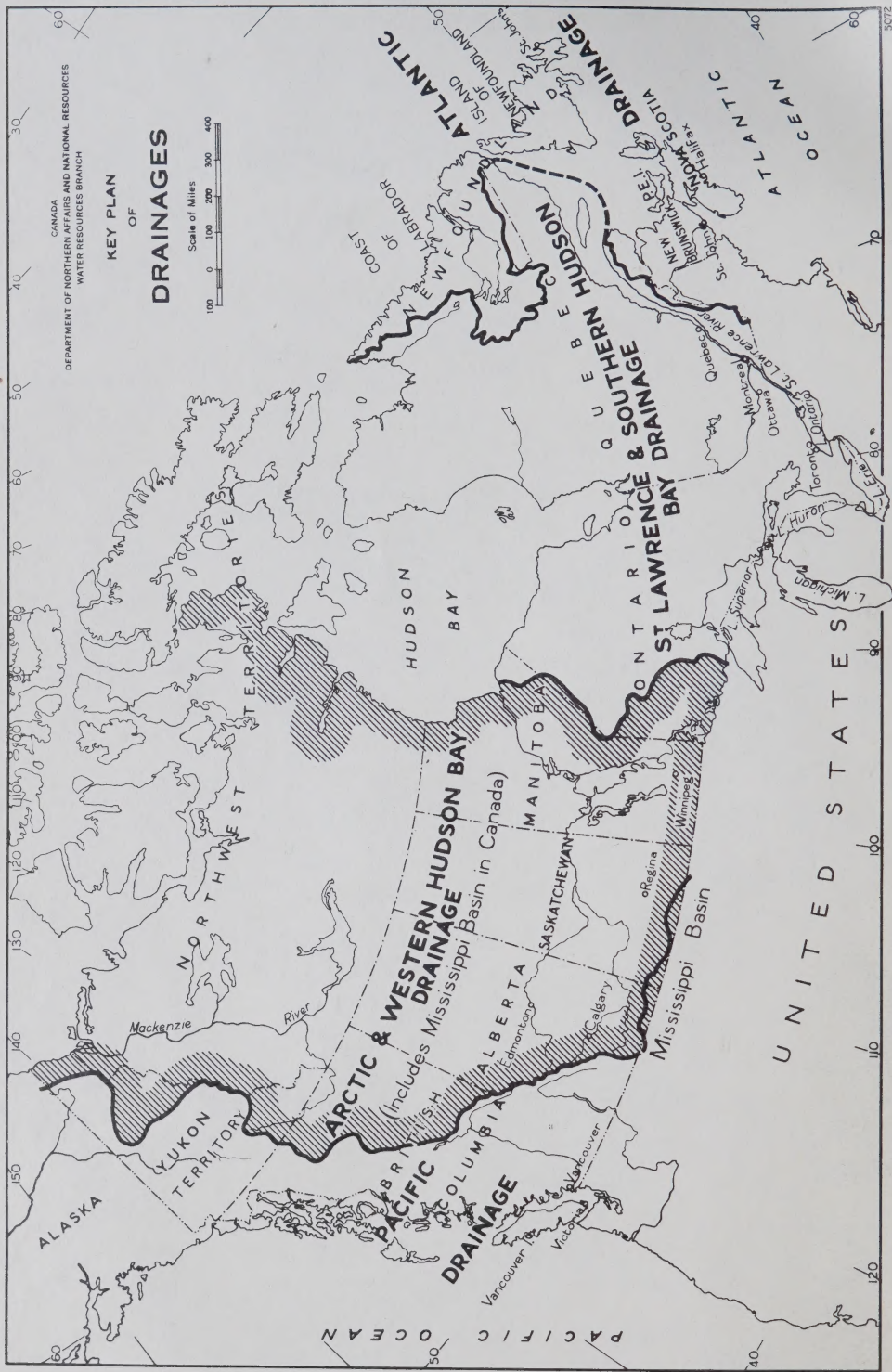


WATER RESOURCES PAPER No. 125

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WATER RESOURCES BRANCH

Water Resources Paper No. 125

SURFACE WATER SUPPLY OF CANADA

ARCTIC AND
WESTERN HUDSON BAY
DRAINAGE

and Mississippi Drainage in Canada

IN

BRITISH COLUMBIA, ALBERTA, SASKATCHEWAN,
MANITOBA, THE NORTHWEST TERRITORIES AND
WESTERN ONTARIO

SEE KEY PLAN

WATER YEAR
1957-58

ISSUED UNDER THE AUTHORITY OF THE
HONOURABLE WALTER DINSDALE, P.C., M.P.
MINISTER OF NORTHERN AFFAIRS AND NATIONAL RESOURCES
OTTAWA

Price \$3.00

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PREFACE

This Paper was prepared by personnel of the Water Resources Branch under the general administrative supervision of the Director, Water Resources Branch, Department of Northern Affairs and National Resources, Ottawa.

Collection and compilation of the basic data for the respective Districts were accomplished under the direction of the following District Engineers:

E. P. Collier	- Alberta-Saskatchewan District Calgary, Alberta
R. D. May	- Manitoba and Northwestern Ontario District Winnipeg, Manitoba
H. T. Ramsden	- British Columbia District Vancouver, British Columbia

Grateful acknowledgment is made of the co-operation received from agencies of the Provinces of Alberta, Saskatchewan and Manitoba and from other organizations.

PART I

INTRODUCTION

The Water Resources Branch, Department of Northern Affairs and National Resources, Ottawa, herein presents for the water year 1957-58, the results of the hydrometric survey investigations which were made on those streams and rivers of Canada which drain to the Arctic Ocean, to western Hudson Bay and to the Mississippi River. The area covered includes the whole of the Provinces of Alberta, Saskatchewan and Manitoba, the whole of the Northwest Territories, those parts of northeastern British Columbia and of Yukon Territory lying to the east of the Rocky Mountain divide, and that part of northwestern Ontario which drains to the Nelson and Hayes Rivers.

ORGANIZATION AND HISTORY OF HYDROMETRIC SURVEY OPERATIONS

During the years covered by this Paper, Hydrometric Survey investigations in the Provinces of Alberta, Saskatchewan, Manitoba and Ontario, were conducted by the Water Resources Branch, Department of Northern Affairs and National Resources of Canada, under individual co-operative agreements with each provincial government or its agency. Under these agreements, the provincial authorities contribute to the cost of the basic field investigations which are carried out by the Water Resources Branch in accordance with mutually agreed-upon plans. In the Yukon and Northwest Territories, the work forms a part of the investigations carried out by the Federal Government.

In Alberta and Saskatchewan, stream measurement work was carried on between 1894 and 1908 in connection with the Canadian Irrigation Surveys. Early in 1909 the Hydrometric Survey was organized as part of the Forestry and Irrigation Branch and was conducted by that Branch until 1911. The Hydrometric Survey was then assigned to the Irrigation Branch (later the Reclamation Service) remaining in that organization until July 1920, when it was transferred to the Dominion Water Power Branch. Following the transfer of the natural resources to provincial control as of 1 October 1930, co-operative agreements between the Federal and the two Provincial Governments provided for the continuance of the Hydrometric Survey by the Federal Government.

In Manitoba, the Hydrometric Survey dates from the inception of the Winnipeg River Power Survey in 1911 by the Dominion Water Power Branch. In 1912 the Survey was expanded to embrace all of Manitoba and the Lake of the Woods in Ontario. As of 1 October 1919, by co-operative agreement between the Federal and Ontario Governments, the Hydrometric Survey was extended to include all of the Province of Ontario. Following the transfer of the natural resources of Manitoba to provincial control as of 15 July 1930, a similar co-operative agreement was arranged with the Government of Manitoba.

CO-OPERATION AND ACKNOWLEDGMENTS

Co-operative undertakings with other agencies form an important part of the activities of the Branch. Close co-operation has been maintained with public agencies and private organizations concerned with water resources. Runoff and other data have been mutually exchanged and stream-gauging operations have been facilitated by assistance received from a number of organizations.

On waters adjacent to the International Boundary, certain gauging stations are maintained by Canada (or the United States) under agreement with the United States (or Canada) and the records are collected and compiled in a manner equally acceptable in both countries. These stations are designated as "International Gauging Stations" in Part II.

For the valuable assistance and co-operation received in obtaining hydrometric survey records, the Water Resources Branch is indebted to the following organizations:

Federal - Department of Agriculture, P.F.R.A.; Department of Agriculture, Research Branch; Royal Canadian Mounted Police.

Provincial - Conservation and Development Branch, Saskatchewan; Water Resources Branch, Alberta; Eastern Rockies Forest Conservation Board, Alberta; St. Mary-Milk River Development, Alberta; Department of Mines and Natural Resources, Manitoba; Manitoba Power Commission, Manitoba; Hydro-Electric Power Commission, Ontario.

Municipal - City of Winnipeg Hydro-Electric System, Manitoba; Winnipeg Electric Company, Manitoba; City of Calgary, Alberta.

Private - In Alberta: Western Irrigation District, Eastern Irrigation District, United Irrigation District, Lethbridge Northern Irrigation District, Consolidated Mining and Smelting Company, Eldorado Mining and Refining Limited and Northern Transportation Company.

In Manitoba: Churchill River Power Company, Lake of the Woods Milling Company, Ontario and Minnesota Pulp and Paper Company, Sheritt-Gordon Mines Limited and Kenora Power Company.

SCOPE OF PAPER

This Paper is one of a series containing hydrometric survey data for the Arctic and Western Hudson Bay Drainage Division of Canada, as outlined on the frontispiece key map. The Paper contains stream-flow, water-level and meteorological data for the water year 1957-58. The particular rivers or lakes for which data are reported herein are listed in the index, Part V.

All Water Resources Papers, Surface Water Supply of Canada, are designated by official numbers. A complete list of those which have been issued, sub-divided according to the four drainages of Canada, is given in Part IV. Reference is made in the list, to those Papers which contain summaries of mean monthly discharge for the period of record.

At most gauging stations for which data are given herein, records have been compiled for a number of years and their publication extends through a number of previous Water Resources Papers. In some instances, records have been obtained at stations for which observations are not currently being taken. The tabulation "Reference List of Hydrometric Survey Records" in Part IV of this Paper is intended to serve as a guide with respect to the rivers and lakes in the Arctic and Western Hudson Bay Drainage for which records are available over an appreciable period of time. The tabulation lists each river or lake, together with the numbers of the Water Resources Papers in which the records were published.

More detailed information regarding individual stations and related records, as well as recent data which have not yet been published, may be obtained upon application to:

District Engineer,
Water Resources Branch,
Department of Northern Affairs
and National Resources,
532 Dominion Public Building,
Winnipeg 1, Manitoba.

District Engineer,
Water Resources Branch,
Department of Northern Affairs
and National Resources,
423 Public Building,
Calgary, Alberta.

District Engineer,
Water Resources Branch,
Department of Northern Affairs
and National Resources
325 Granville Street,
Vancouver 2, British Columbia.

or to the Director, Water Resources Branch, Department of Northern Affairs and National Resources, Ottawa, Ontario.

DEFINITION OF TERMS AND ABBREVIATIONS

"Cubic feet per second" (cfs) is the rate of discharge of a stream whose channel is one square foot in cross-section area and whose velocity is one foot per second. It is the basic unit in general use, other units being computed from it by the use of factors as given in a later paragraph under "Convenient Equivalents of Measurement".

"Cubic feet per second per square mile" (cfs/m) is the average number of cubic feet of water flowing per second from each square mile of area drained, on the assumption that the runoff is distributed uniformly in regard to both time and area.

"Runoff Depth in Inches" is the depth to which a drainage area would be covered if all the water flowing from it in a given period were conserved and distributed uniformly on the surface. It is used for comparing runoff with rainfall, which is usually expressed in depth in inches.

"Acre-foot" is the quantity of water required to cover one acre to a depth of one foot and is equal to 43,560 cubic feet.

"Mile-foot" is the quantity of water required to cover one square mile to a depth of one foot and is equal to 640 acre-feet or 27,878,400 cubic feet.

"Stage-discharge relation" is the relation of gauge height or elevation of water surface to discharge.

"Control", "Controlling Section" and "Point of Control" are terms used to designate the section or sections of the stream channel below the gauge which determine the stage-discharge relation at the gauge. The same section or sections may not form the control at all river stages.

METHOD OF TABULATION OF RUNOFF DATA

For most gauging stations where a systematic record of discharge was obtained during the year under review, the following data are given where available:

1. Description of the station.
2. Table of daily discharge, monthly discharge and monthly runoff.
3. Summary of yearly discharge and yearly runoff.

1. The description of the station contains the following:

Location - refers specifically to the location of the gauge and for most stations also represents closely the location of the discharge measurement section. However, if the gauge and the discharge measurement section are located an appreciable distance apart, the location of the discharge measurement section is indicated in relation to that of the gauge under "Measurement of Discharge".

Drainage Area - refers to the area within the watershed which lies upstream of the discharge measurement section.

Gauge - is the installation used to obtain water level data. For the purpose of reference herein, the various types of gauges are indicated as follows:

- (a) "Recording - water-stage recorder from which continuous water levels are obtained.
- (b) "Staff", "wire-weight", "tape-weight", "chain" or "slope" - each of which is a manually operated gauge. At these gauges, water-level observations normally are obtained once daily.
- (c) "Measuring point" - a reference point which is sometimes used when only occasional water-level observations are required or which may serve as a temporary means of water-level observation pending the installation of a regular manual or recording gauge.

Attention is called to the fact that the zero of the gauge bears no relation to zero flow or to the bottom of the river.

Measurement of Discharge - refers to the manner in which discharge measurements are obtained, i.e. from cable-way, bridge or boat, or by wading.

Period of Record - refers to the length and continuity of record obtained at the station.

In some instances, a station has been relocated a short distance upstream or downstream from the initial location, generally for the purpose of utilizing more favourable discharge conditions. If the river discharge at the new location is not significantly different from that at the previous location or, if the change in drainage area following such a relocation is insignificant in comparison to the total contributing area upstream of the station, the individual locations are considered as one station and all records are published under one station number; however, the length of record is usually specified for each location of that station.

When reference is made in the description of one station to records which have been obtained at some other station on the same river, such reference appears under "Remarks".

Average Discharge - refers to the average discharge for the number of years indicated. It is based only on complete years of record at those stations for which at least five complete years of record have been obtained.

Extremes Recorded - refers to the extremes of stage or discharge for the period of record.

For stations at which discharge records are obtained, the maximum and minimum daily discharges and, where possible, the maximum instantaneous discharge, are given. In addition, if the gauge is referred to a standard datum, such as the Geodetic Survey of Canada datum, the water elevation corresponding to the indicated extreme in each case is also included where such extreme occurred during an open-water period.

For stations at which only water elevations or gauge heights are obtained, maximum and minimum daily extremes and, where possible, maximum instantaneous extremes, are given.

Revisions - refers to changes made in previously published records. The period for which records were revised is shown. Where the revised records have been published, the number of the Water Resources Paper in which they appear is given. Where such revisions have not been published, the District Engineer who can provide copies of the revised records is specified. Where the revision consists of a change in drainage area, the number of the Paper in which the revision first was published is indicated. It should be noted that a revision of the drainage area changes the figures given for discharge in cubic feet per second per square mile and for runoff depth in inches in previously published records.

Remarks - refers to the accuracy of the current records and may contain other pertinent information not covered elsewhere.

2. The table of daily discharge gives the daily discharge in cubic feet per second corresponding to the daily gauge height or elevation of the water surface at the station. Where observations of water level are made more frequently than once each day or records from a water-stage recorder are available, the mean of the day's readings is used in computing the discharge.

Within the table of daily discharge, the maximum and minimum daily discharges for each month are underlined. When such maximum or minimum discharge occurs more than once during the month, it is underlined only for the earliest date of occurrence.

The following standard symbols are used opposite the daily discharge to which they apply: - "b", water levels and stage-discharge relationship affected by ice conditions; - "e", discharge estimated, - "x", recording gauge out of operation and manual gauge used; - "a", the mean of two or more gauge readings was used to obtain corresponding discharge. When the condition applies to more than a few days, only the terminal dates are marked by the symbol. In all cases, appropriate reference to the symbols used is contained in a footnote.

At the bottom of the table of daily discharge are listed the mean monthly discharge, discharge per square mile and mean monthly runoff for each complete month of record. Discharges are given in cubic feet per second. Mean monthly runoff data are given in acre-feet. For streams in which the discharge at times is very small the number "0", "0.0" or "0.00" (depending on the number of significant figures used) is used to indicate a discharge below the last significant figure; if the discharge ceases completely, the expression "nil" is used.

3. A summary of the yearly discharge and runoff is given below the table of daily and monthly data. If the records do not cover a complete year, the summary applies to the period for which records were obtained.

ACCURACY OF FIELD DATA AND COMPUTED RESULTS

The accuracy of stream-flow data depends on (1) the stability of the stage-discharge relation, or if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge and interpretation of records.

In order to give some indication of the quality of the currently published records, the probable accuracy of the daily record is indicated, in the description of the station under "Remarks" as "excellent", "good", "fair" or "poor". The records of monthly and yearly stream flow are, in general, more accurate than the daily records.

CONVENIENT EQUIVALENTS OF MEASUREMENT

The following is a list of convenient equivalents of measurement for use in hydraulic computations:

- 1 mile equals 5,280 feet.
- 1 acre equals 43,560 square feet.
- 1 cubic foot of water weighs 62.4 pounds at 52°F.
- 1 foot per second equals 0.682 mile per hour.
- 1 cubic foot per second equals 6.23 Imperial gallons per second; equals 7.48 United States gallons per second.
- 1 cubic foot per second for one day equals 1.983 acre-feet.
- 1 cubic foot per second for one day covers one square mile to a depth of 0.03719 inch.
- 1 foot equals 0.3048 metre.
- 1 acre equals 0.4047 hectare.
- 1 mile equals 1.60935 kilometres.
- 1 cubic metre per minute equals 0.5886 cubic foot per second.
- 1 horse-power equals 550 foot-pounds per second.
- 1 horse-power equals 76.0 kilogram-metres per second.
- 1 horse-power equals 746 watts or 0.746 kilowatt.
- 1 horse-power equals one cubic foot per second of water falling 8.81 feet.

Available water power at a site may be determined approximately as follows:

Cubic feet per second x fall in feet ÷ 10 = net horsepower from water wheel, realizing 88% of theoretical power.

CONVERSION TABLES

Table for converting Velocity in Feet per Second into Velocity in Miles per Hour

Feet Per Second Units	Feet Per Second - Tenths									
	0	1	2	3	4	5	6	7	8	9
	Miles per Hour									
0.....	0.000	0.068	0.136	0.205	0.273	0.341	0.409	0.477	0.545	0.614
1.....	0.682	0.750	0.818	0.886	0.955	1.023	1.091	1.159	1.227	1.295
2.....	1.364	1.432	1.500	1.568	1.636	1.705	1.773	1.841	1.909	1.977
3.....	2.045	2.114	2.182	2.250	2.318	2.386	2.455	2.523	2.591	2.659
4.....	2.727	2.795	2.864	2.932	3.000	3.068	3.136	3.205	3.273	3.341
5.....	3.409	3.477	3.545	3.614	3.682	3.750	3.818	3.886	3.955	4.023
6.....	4.091	4.159	4.227	4.295	4.364	4.432	4.500	4.568	4.636	4.705
7.....	4.773	4.841	4.909	4.977	5.045	5.114	5.182	5.250	5.318	5.386
8.....	5.455	5.523	5.591	5.659	5.727	5.795	5.864	5.932	6.000	6.068
9.....	6.136	6.205	6.273	6.341	6.409	6.477	6.545	6.614	6.682	6.750

Table for converting Discharge in Cubic Feet per Second per Square Mile into Runoff in Depth in Inches

Discharge in Cubic Feet per Second per Square Mile	Runoff in Inches				
	1 day	28 days	29 days	30 days	31 days
1.....	0.03719	1.041	1.079	1.116	1.153
2.....	0.07438	2.083	2.157	2.231	2.306
3.....	0.11157	3.124	3.236	3.347	3.459
4.....	0.14876	4.165	4.314	4.463	4.612
5.....	0.18595	5.207	5.393	5.579	5.764
6.....	0.22314	6.248	6.471	6.694	6.917
7.....	0.26033	7.289	7.550	7.810	8.070
8.....	0.29752	8.331	8.628	8.926	9.223
9.....	0.33471	9.372	9.707	10.041	10.376

Table for converting Discharge in Cubic Feet per Second into Runoff in Acre-feet

Discharge in Cubic Feet per Second	Runoff in Acre-feet				
	1 day	28 days	29 days	30 days	31 days
1.....	1.983	55.54	57.52	59.50	61.49
2.....	3.967	111.07	115.04	119.01	122.97
3.....	5.950	166.61	172.56	178.51	184.46
4.....	7.934	222.15	230.08	238.02	245.95
5.....	9.917	277.69	287.60	297.52	307.44
6.....	11.901	333.22	345.12	357.02	368.93
7.....	13.884	388.76	402.64	416.53	430.41
8.....	15.868	444.30	460.16	476.03	491.90
9.....	17.851	499.83	517.69	535.54	553.39

Table for converting Discharge in Cubic Feet per Second into Runoff in Millions of Imperial Gallons

Discharge in Cubic Feet per Second	Runoff in Millions of Gallons				
	1 day	28 days	29 days	30 days	31 days
1.....	0.5383	15.07	15.61	16.15	16.69
2.....	1.0765	30.14	31.22	32.30	33.37
3.....	1.6148	45.21	46.83	48.44	50.06
4.....	2.1531	60.29	62.44	64.59	66.75
5.....	2.6914	75.36	78.05	80.74	83.43
6.....	3.2296	90.43	93.66	96.89	100.12
7.....	3.7679	105.50	109.27	113.04	116.80
8.....	4.3062	120.57	124.88	129.19	133.49
9.....	4.8444	135.64	140.49	145.33	150.18

PART II

HYDROMETRIC SURVEY DATA

HAYES RIVER DRAINAGE BASIN

The Hayes River drains a basin 36,700 square miles in extent, lying between the Nelson and Severn Rivers, and flows in a generally northeasterly direction to Hudson Bay.

The main stream of the Hayes River has its source about fifteen miles north of Molson Lake, at the height of land where the Echimamish River flows westerly to the Nelson River.

Innumerable lakes of varying size are located in the upper reaches of the watershed; the principal ones are Molson, Stevenson, Island, Beaverhill, Gods, Red Sucker, Oxford and Knee.

The main tributary streams are Gods River, which enters about forty miles above York Factory at the mouth, and carries the drainage from the country east of the Hayes River; and Fox River entering forty miles further upstream, which drains the western portion of the basin.

The physical characteristics are variable and typical of drainage basins in regions forming part of the Canadian Shield.

From the outlet to the confluence with the Fox River, the Hayes River is comparatively wide and shallow. The reach above the Fox River extending to Knee Lake is narrow with many rapids, and the upper reaches run through rocky terrain, and generally consist of a chain of lakes, connected by short stretches of rapids. Much of the watershed is covered with poplar and spruce, and in conjunction with the large lake areas, provides good natural regulation of flow.

HAYES RIVER AT OUTLET OF OXFORD LAKE - STATION No. 4AA1

Location: Lat. 54° 57' 20", long. 95° 16' 10", Manitoba. Drainage Area: 3,250 square miles. Gauge: Staff. Measurement of Discharge: From boat. Period of Record: Gauge heights and discharges, March 1957 to date. Extremes Recorded: Daily - Maximum, 25 July 1957, 1,520 cfs, Minimum, 21 October 1957, 130 cfs. Remarks: Records good during open-water periods; fair during ice periods.

Daily Discharge in Cubic Feet per Second for Water Year 1956-57

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	-	-	-	-	-	-	576	546	1,260	1,300	1,380	845
2.....	-	-	-	-	-	-	576	546	1,310	1,330	1,340	827
3.....	-	-	-	-	-	-	576	546	1,270	1,430	1,360	800
4.....	-	-	-	-	-	-	576	560	1,300	1,410	1,370	784
5.....	-	-	-	-	-	-	568	560	1,300	1,410	1,340	760
6.....	-	-	-	-	-	-	568	600	1,310	1,410	1,360	744
7.....	-	-	-	-	-	-	568	640	1,310e	1,340	1,340	744
8.....	-	-	-	-	-	-	560	680	1,320	1,430	1,350	744
9.....	-	-	-	-	-	-	560	720	1,320	1,450	1,360	728
10.....	-	-	-	-	-	-	560	720	1,320e	1,430	1,360	720
11.....	-	-	-	-	-	-	560	720	1,320e	1,480	1,370	720
12.....	-	-	-	-	-	-	560	760	1,320	1,470	1,370	720
13.....	-	-	-	-	-	-	553	760	1,320	1,480	1,340	720
14.....	-	-	-	-	-	-	553	776	1,300	1,440	1,350	632
15.....	-	-	-	-	-	-	553	800	1,310	1,430	1,360	640
16.....	-	-	-	-	-	-	553	818	1,330	1,480	1,330	640
17.....	-	-	-	-	-	-	553	818	1,330	1,450	1,320	640
18.....	-	-	-	-	-	-	553	845	1,330	1,480	1,310	640
19.....	-	-	-	-	-	584b	553	935	1,330	1,480	1,300	640
20.....	-	-	-	-	-	584	553	980	1,330e	1,450	1,250	539
21.....	-	-	-	-	-	584	546	998	1,330e	1,440	1,160	525
22.....	-	-	-	-	-	584	546	1,040	1,330	1,450	1,200	504
23.....	-	-	-	-	-	584	546	1,070	1,260	1,460	1,140e	525
24.....	-	-	-	-	-	584	546	1,070	1,300	1,450	1,080e	525
25.....	-	-	-	-	-	584	546	1,110	1,290	1,520	1,020e	490
26.....	-	-	-	-	-	584	546	1,120	1,290	1,490	953	476
27.....	-	-	-	-	-	584	546	1,130	1,260	1,370	935	469
28.....	-	-	-	-	-	584	546	1,160	1,260	1,430	936	455
29.....	-	-	-	-	-	576	546	1,160	1,300	1,410	935	455
30.....	-	-	-	-	-	576	546b	1,170	1,330	1,380	926	490
31.....	-	-	-	-	-	576	-	1,220e	-	1,380	881	-
Mean	-	-	-	-	-	-	556	857	1,310	1,430	1,230	638
Per sq. mi.	-	-	-	-	-	-	0.17	0.26	0.40	0.44	0.38	0.20
Acre-feet	-	-	-	-	-	-	33,100	52,700	77,700	88,000	75,400	38,000

The Period.....Discharge: Daily - Maximum 25 July, 1,520
(183 days) - Minimum 28 September, 455

Mean 1,000; Per Square Mile 0.31

Runoff: Acre-feet 364,900; Depth in inches on drainage area 2.11

b - Ice conditions 19 March to 30 April.

Discharges related to water elevations of Oxford Lake.

e - Estimated.

Daily Gauge Heights in Feet for Water Year 1956-57

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	-	-	-	-	-	-	11.31	10.98	11.81	11.86	11.94	11.35
2.....	-	-	-	-	-	-	11.30	10.98	11.87	11.89	11.90	11.33
3.....	-	-	-	-	-	-	11.29	10.98	11.82	12.00	11.92	11.30
4.....	-	-	-	-	-	-	11.26	11.00	11.85	11.98	11.93	11.28
5.....	-	-	-	-	-	-	11.26	11.00	11.85	11.98	11.90	11.25
6.....	-	-	-	-	-	-	11.25	11.05	11.87	11.98	11.92	11.23
7.....	-	-	-	-	-	-	11.23	11.10	-	11.90	11.90	11.23
8.....	-	-	-	-	-	-	11.21	11.15	11.88	12.00	11.91	11.23
9.....	-	-	-	-	-	-	11.20	11.20	11.88	12.02	11.92	11.21
10.....	-	-	-	-	-	-	11.20	11.20	-	12.00	11.92	11.20
11.....	-	-	-	-	-	-	11.21	11.20	-	12.05	11.93	11.20
12.....	-	-	-	-	-	-	11.20	11.25	11.88	12.04	11.93	11.20
13.....	-	-	-	-	-	-	11.20	11.25	11.88	12.05	11.90	11.20
14.....	-	-	-	-	-	-	11.19	11.27	11.85	12.01	11.91	11.09
15.....	-	-	-	-	-	-	11.17	11.30	11.87	12.00	11.92	11.10
16.....	-	-	-	-	-	-	11.19	11.32	11.89	12.05	11.89	11.10
17.....	-	-	-	-	-	-	11.18	11.32	11.89	12.02	11.88	11.10
18.....	-	-	-	-	-	-	11.16	11.35	11.89	12.05	11.87	11.10
19.....	-	-	-	-	-	11.35	11.16	11.45	11.89	12.06	11.85	11.10
20.....	-	-	-	-	-	11.35	11.16	11.50	-	12.02	11.80	10.97
21.....	-	-	-	-	-	11.34	11.13	11.52	-	12.01	11.70	10.95
22.....	-	-	-	-	-	11.34	11.18	11.57	11.89	12.02	11.75	10.92
23.....	-	-	-	-	-	11.34	11.15	11.60	11.81	12.03	-	10.95
24.....	-	-	-	-	-	11.35	11.17	11.60	11.85	12.02	-	10.95
25.....	-	-	-	-	-	11.36	11.19	11.64	11.84	12.10	-	10.90
26.....	-	-	-	-	-	11.36	-	11.65	11.84	12.07	11.47	10.88
27.....	-	-	-	-	-	11.34	11.06	11.67	11.81	11.93	11.45	10.87
28.....	-	-	-	-	-	11.33	11.04	11.70	11.81	12.00	11.44	10.85
29.....	-	-	-	-	-	11.33	11.00	11.70	11.86	11.98	11.45	10.85
30.....	-	-	-	-	-	11.31	11.04	11.71	11.89	11.95	11.44	10.90
31.....	-	-	-	-	-	11.31	-	-	-	11.95	11.39	-

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	420	208	154	160	164	166	268	385	760	971	998	696
2.....	434	220	154	160	164	166	268	392	784	962	971	776
3.....	455	220	154	160	164	172	274	399	818	998	944	760
4.....	406	220	154	160	164	172	274	406	827	953	944	818
5.....	420	208	154	160	164	172	280	413	827	944	998	776
6.....	406	196	154	160	164	178	280	420	845	971	962	736
7.....	406	196	154	160	164	178	280	434	881	971	998	809
8.....	413	196	154	160	164	184	287	441	917	962	1,020	818
9.....	399	196	154	160	164	184	287	448b	953	998	1,020	768
10.....	385	196	154	160	164	190	287	462	980	971	989	768
11.....	371	184	154	160	164	190	294	469	980	989	1,030	752
12.....	371	184	154	160	164	196	294	476	890	971	989	744
13.....	371	172	154	160	164	196	301	483	890	989	1,060	688
14.....	371	160	154	160	164	196	301	490	890	971	1,050	768
15.....	371	160	154	160	164	196	308	497	890	962	1,050	863
16.....	371	160	154	160	164	202	308	504	890	962	998	836
17.....	371	154	154	160	164	208	315	511	935	881	980	863
18.....	371	154	154	160	164	214	315	518	1,040	881	980	998
19.....	350	154	154	164	164	220	322	518	971	917	953	980
20.....	350	154	154	164	164	226	329	532	962	917	908	980
21.....	130	154	154	164	164	232	336	539	971	926	863	1,110
22.....	268	154	160	164	164	238	336	553	971	953	854	1,030
23.....	268	154	160	164	164	238	343	560	971	998	881	1,020
24.....	262	154b	160	164	164	244	350	560	935	1,020	863	998
25.....	262	154	160	164	164	244	350	560	998	1,080	836	1,020
26.....	262	154	160	164	164	244	357	592	998	1,070	809	1,040
27.....	250	154	160	164	164	250	364	600	1,020	971	776	1,030
28.....	250	154	160	164	164	250	364	640	1,020	971	800	1,020
29.....	250	154	160	164	-	256	371	680	1,020	998	752	1,030
30.....	220e	154	160	164	-	256	378	720	917	980	768	1,030
31.....	184	-	160	164	-	262	-	736	-	1,080	760	-
Mean	336	174	156	162	164	210	314	514	925	974	929	884
Per sq. mi.	0.10	0.05	0.05	0.05	0.05	0.06	0.10	0.16	0.28	0.30	0.29	0.27
Acre-feet	20,700	10,400	9,590	9,940	9,110	12,900	18,700	31,600	55,000	59,900	57,100	52,600

The Year..... Discharge: Daily - Maximum 21 September, 1,110

- Minimum 21 October, 130

Mean 480; Per Square Mile 0.15

Runoff: Acre-feet 347,500; Depth in inches on drainage area 2.00

b - Ice conditions 24 November to 9 May.

e - Estimated.

Discharges related to water elevations of Oxford Lake.

Daily Gauge Heights in Feet for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	10.80	10.48	10.65	10.70	10.75	10.77	10.89	10.93	11.25	11.49	11.52	11.17
2.....	10.82	10.50	10.65	10.70	10.75	10.77	10.89	10.93	11.28	11.48	11.49	11.27
3.....	10.85	10.50	10.65	10.70	10.75	10.79	10.88	10.93	11.32	11.52	11.46	11.25
4.....	10.78	10.50	10.65	10.70	10.74	10.79	10.88	10.91	11.33	11.47	11.46	11.32
5.....	10.80	10.48	10.65	10.70	10.74	10.79	10.88	10.91	11.33	11.46	11.52	11.27
6.....	10.78	10.46	10.65	10.70	10.74	10.79	10.89	10.89	11.35	11.49	11.48	11.22
7.....	10.78	10.46	10.65	10.70	10.74	10.79	10.89	10.87	11.39	11.49	11.52	11.31
8.....	10.79	10.46	10.65	10.70	10.75	10.79	10.88	10.86	11.43	11.48	11.54	11.32
9.....	10.77	10.46	10.65	10.70	10.75	10.79	10.88	10.86	11.47	11.52	11.54	11.26
10.....	10.75	10.46	10.65	10.70	10.75	10.79	10.89	10.86	11.50	11.49	11.51	11.26
11.....	10.73	10.44	10.65	10.70	10.75	10.79	10.89	10.87	11.50	11.51	11.56	11.24
12.....	10.73	10.44	10.65	10.70	10.75	10.79	10.89	10.88	11.40	11.49	11.51	11.23
13.....	10.73	10.42	10.65	10.70	10.75	10.79	10.90	10.89	11.40	11.51	11.59	11.16
14.....	10.73	10.40	10.65	10.70	10.75	10.79	10.90	10.90	11.40	11.49	11.58	11.26
15.....	10.73	10.40	10.65	10.70	10.75	10.79	10.90	10.91	11.40	11.48	11.58	11.37
16.....	10.73	10.40	10.65	10.70	10.75	10.83	10.90	10.92	11.40	11.48	11.52	11.34
17.....	10.73	10.39	10.65	10.70	10.75	10.85	10.90	10.93	11.45	11.39	11.50	11.37
18.....	10.73	10.39	10.65	10.70	10.75	10.88	10.90	10.94	11.57	11.39	11.50	11.52
19.....	10.70	10.39	10.65	10.70	10.75	10.88	10.90	10.94	11.49	11.43	11.47	11.50
20.....	10.70	10.39	10.65	10.70	10.75	10.88	10.91	10.96	11.48	11.43	11.42	11.50
21.....	10.35	10.39	10.65	10.70	10.75	10.88	10.91	10.97	11.49	11.44	11.37	11.64
22.....	10.58	10.39	10.67	10.70	10.75	10.88	10.93	10.99	11.49	11.47	11.36	11.56
23.....	10.58	10.39	10.67	10.70	10.75	10.88	10.93	11.00	11.49	11.52	11.39	11.54
24.....	10.57	10.45	10.67	10.70	10.75	10.90	10.92	11.00	11.45	11.55	11.37	11.52
25.....	10.57	10.66	10.70	10.70	10.75	10.90	10.91	11.00	11.52	11.61	11.34	11.54
26.....	10.57	10.66	10.70	10.70	10.75	10.91	10.91	11.04	11.52	11.60	11.31	11.57
27.....	10.55	10.65	10.70	10.70	10.75	10.91	10.92	11.05	11.55	11.49	11.27	11.56
28.....	10.55	10.65	10.70	10.70	10.75	10.91	10.92	11.10	11.54	11.49	11.30	11.54
29.....	10.55	10.65	10.70	10.70	-	10.92	10.92	11.15	11.55	11.52	11.24	11.56
30.....	-	10.65	10.70	10.73	-	10.90	10.92	11.20	11.43	11.50	11.26	11.56
31.....	10.44	-	10.70	10.75	-	10.89	-	11.22	-	11.61	11.25	-

ISLAND LAKE NEAR ISLAND LAKE P.O. - STATION No. 4AC₂

Location: Lat. 53° 51' 40", long. 94° 39' 43", Manitoba, at Indian Affairs Nursing Station, I.R. 22A. Gauge: Staff; elevations referred to Mean Sea Level (Inter-Provincial Boundary Survey). Period of Record: January 1933 to October 1934 and June 1940 to date. Extremes Recorded: Daily - Maximum, 26 June 1937, 751.51 feet, Minimum, 8 April 1949, 746.58 feet. Remarks: From February 1934 to June 1940 data were obtained at Trading Post at north end of Linklater Island, Station No. 4AC₃.

Daily Elevations in Feet for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	48.69	48.20	47.86	47.66	47.49	47.34	47.20	48.06	49.16	49.38	-	48.74
2.....	48.66	48.19	47.86	47.64	47.49	47.34	47.22	48.10	49.19	49.38	49.14	48.76
3.....	48.66	48.19	47.86	47.64	47.49	47.32	47.22	48.12	49.22	49.36	49.14	48.76
4.....	48.64	48.16	47.84	47.64	47.46	47.32	47.22	48.14	49.24	-	49.10	48.74
5.....	48.64	48.16	47.84	47.66	47.46	47.30	47.22	48.16	49.26	49.32	49.10	48.74
6.....	48.62	48.14	47.82	47.62	47.46	47.30	47.20	48.19	49.29	49.30	49.12	48.72
7.....	48.60	48.14	47.82	47.62	47.44	47.29	47.20	48.20	49.30	49.28	49.10	48.70
8.....	48.59	48.12	47.80	47.59	47.44	47.29	47.22	48.24	49.32	49.24	49.10	48.69
9.....	48.56	48.10	47.80	47.59	47.44	47.26	47.22	48.29	49.34	49.22	49.10	48.66
10.....	48.54	48.09	47.80	47.56	47.42	47.26	47.24	48.30	49.36	49.18	49.10	48.66
11.....	-	48.06	47.80	47.56	47.42	47.26	47.26	48.34	49.36	49.14	49.12	48.64
12.....	48.52	48.06	47.80	47.56	47.40	47.29	47.29	48.39	-	49.14	49.12	48.64
13.....	48.50	48.04	47.79	47.54	47.40	47.29	47.32	48.44	49.39	49.16	49.12	48.62
14.....	48.49	48.04	47.79	47.54	47.39	47.29	47.36	48.49	49.40	49.18	49.12	48.64
15.....	48.46	48.03	47.76	47.54	47.39	47.29	47.39	48.54	49.40	49.16	49.12	48.66
16.....	48.44	48.03	47.76	47.54	47.36	47.26	47.40	48.59	49.40	49.14	49.10	48.66
17.....	48.42	48.02	47.76	47.54	47.36	47.26	47.42	48.62	49.40	49.18	49.06	48.66
18.....	48.40	48.00	47.74	47.52	47.36	47.26	47.46	48.66	49.42	49.14	49.02	48.64
19.....	48.39	47.99	47.74	47.52	47.36	47.26	47.54	-	49.42	49.12	48.99	48.64
20.....	48.36	47.96	47.74	47.52	47.34	47.26	47.60	48.64	49.42	49.14	48.94	48.64
21.....	48.36	47.94	47.72	47.52	47.34	47.26	47.66	48.74	49.42	49.14	48.90	-
22.....	48.34	47.94	47.72	47.50	47.34	47.24	47.70	48.76	49.42	49.14	48.86	48.60
23.....	48.32	47.94	47.72	47.50	47.34	47.24	47.74	48.79	49.42	49.12	48.84	48.59
24.....	48.30	47.94	47.72	47.50	47.36	47.24	47.79	48.80	49.40	49.12	48.82	48.59
25.....	48.29	47.92	47.70	47.50	47.36	47.24	47.82	48.82	49.38	49.14	48.82	48.56
26.....	48.29	47.92	47.70	47.49	47.36	47.22	47.89	48.92	49.38	49.14	48.84	48.56
27.....	48.26	47.90	47.70	47.49	47.36	47.22	47.90	49.00	49.38	49.14	48.86	48.54
28.....	48.24	47.89	47.69	47.50	47.36	47.22	47.96	49.04	49.38	49.14	48.86	48.54
29.....	48.22	47.89	47.69	47.50	-	47.22	48.00	49.09	49.36	49.14	48.84	48.52
30.....	48.20	47.86	47.69	47.49	-	47.20	48.04	49.12	49.34	49.12	48.82	48.52
31.....	48.20	-	47.66	47.49	-	47.20	-	49.14	-	49.12	48.76	-

Add 700.00 to obtain elevation in feet, Inter-Provincial Boundary Survey datum (Mean Sea Level).

Location: Lat. 54° 40', long. 94° 10', Manitoba. Gauge: Chain and staff; elevations referred to Mean Sea Level (Inter-Provincial Boundary Survey). Period of Record: September 1934 to December 1944 and October 1947 to date. Extremes Recorded: Daily - Maximum, 17 September 1952, 599.54 feet, Minimum, 17 April 1949, 592.21 feet. Remarks: Data for February 1933 to October 1934 and August 1945 to September 1947 were obtained at Roman Catholic Mission, Station No. 4AC₁.

Daily Elevations in Feet for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	95.54	95.12	94.72	94.34	94.32	94.08	93.88	93.88	94.02	94.04	95.34	95.44
2.....	95.54	95.10	94.70	94.34	94.30	94.08	93.88	93.88	94.04	94.06	95.38	95.42
3.....	95.52	95.10	94.68	94.34	94.30	94.06	93.88	93.88	94.06	94.06	95.42	95.42
4.....	95.52	95.08	94.68	94.32	94.28	94.06	93.86	93.90	94.10	94.08	95.46	95.42
5.....	95.50	95.08	94.66	94.32	94.28	94.04	93.86	93.90	94.12	94.08	95.48	95.42
6.....	95.50	95.06	94.66	94.32	94.28	94.04	93.86	93.90	94.14	94.10	95.50	95.42
7.....	95.48	95.06	94.64	-	94.26	94.04	93.86	93.90	94.16	94.12	95.50	95.42
8.....	95.46	95.04	94.62	-	94.26	94.02	93.84	93.90	94.18	94.16	95.50	95.42
9.....	95.44	95.04	94.60	-	94.24	94.02	93.84	93.90	94.18	94.20	95.50	95.42
10.....	95.44	95.02	94.58	-	94.24	94.02	93.84	93.90	94.20	94.24	95.48	95.42
11.....	95.42	95.02	94.58	-	94.22	94.00	93.84	93.90	94.22	94.28	95.48	95.44
12.....	95.42	95.00	94.56	-	94.22	94.00	93.84	93.90	94.24	94.32	95.48	95.44
13.....	95.42	95.00	94.54	-	94.22	94.00	93.84	93.92	94.24	94.38	95.48	95.44
14.....	95.40	94.98	94.52	-	94.20	93.98	93.84	93.92	94.26	94.44	95.48	95.46
15.....	95.40	94.98	94.50	-	94.20	93.98	93.84	93.92	94.26	94.48	95.48	95.46
16.....	95.38	94.96	94.50	-	94.18	93.98	93.86	93.92	94.28	94.52	95.46	95.48
17.....	95.36	94.94	94.48	-	94.18	93.98	93.86	93.92	94.28	94.56	95.46	95.48
18.....	95.34	94.94	94.48	-	94.18	93.96	93.86	93.94	94.30	94.60	95.46	95.48
19.....	95.34	94.92	94.44	-	94.16	93.96	93.86	93.94	94.32	94.64	95.46	95.48
20.....	95.32	94.90	94.44	-	94.16	93.96	93.86	93.94	94.34	94.70	95.46	95.46
21.....	95.32	94.90	94.42	-	94.16	93.96	93.86	93.94	94.36	94.76	95.46	95.46
22.....	95.30	94.88	94.42	-	94.14	93.94	93.86	93.94	94.36	94.82	95.46	95.46
23.....	95.30	94.88	94.40	-	94.14	93.94	93.86	93.96	94.38	94.86	95.44	95.46
24.....	95.18	94.86	94.40	-	94.12	93.94	93.88	93.96	94.40	94.90	95.44	95.46
25.....	95.18	94.84	94.40	-	94.12	93.94	93.88	93.96	94.40	94.96	95.44	95.44
26.....	95.18	94.82	94.38	-	94.10	93.92	93.88	93.96	94.42	95.00	95.44	95.44
27.....	95.16	94.80	94.38	-	94.10	93.92	93.88	93.96	94.00	95.04	95.44	95.44
28.....	95.16	94.78	94.38	-	94.08	93.92	93.88	93.98	94.00	95.10	95.44	95.44
29.....	95.14	94.76	94.36	94.34	-	93.90	93.88	93.98	94.02	95.16	95.44	95.44
30.....	95.14	94.74	94.36	94.34	-	93.90	93.88	94.00	94.04	95.22	95.44	95.44
31.....	95.12	-	94.36	94.32	-	93.90	-	94.00	-	95.28	-	-

Add 500.00 to obtain elevation in feet, Inter-Provincial Boundary Survey datum (Mean Sea Level).

MISCELLANEOUS DISCHARGE MEASUREMENTS MADE IN HAYES RIVER BASIN
FOR THE YEAR 1958

Date	Stream	Location	Discharge cfs
29 Jan.	Gods River	55 miles below Gods Lake at Burton's Cabins	3,670b
17 June	"	"	5,040
12 Aug.	"	"	6,460
26 Sept.	"	"	6,350

b - Ice conditions.

NELSON RIVER DRAINAGE BASIN

The Nelson River, which forms the discharge channel for outflow from Lake Winnipeg and which flows into the southwest corner of Hudson Bay, has a drainage area in excess of 414,000 square miles. Its basin comprises one of the more important drainage systems of the North American continent, extending from the Rocky Mountains in the west nearly to Lake Superior in the east and from the adjacent Athabasca and Churchill River basins in the north to the Mississippi River divide in the south. Lake Winnipeg forms the collecting basin for the discharges of such large rivers as the Winnipeg, Red, Dauphin and Saskatchewan, each of which drains extensive areas, as well as numerous smaller rivers including the Berens, Pigeon, Manigotagan and Brokenhead. The drainage area directly tributary to the Nelson is comparatively small but it includes the basins of the Burntwood, Limestone and Kettle Rivers and of other smaller streams.

The physical characteristics of the terrain of the many sections of the Nelson drainage basin vary greatly, ranging from the mountains and foothills of the eastern slope of the Rocky Mountains to the prairies of the central plains and again to the rocky and hummocky country of the Canadian Shield. Similarly there are great differences in the nature of the vegetation and forest growth throughout the basin.

Because of the large amount of natural storage capacity provided by Lake Winnipeg, and by the adjoining Lakes Manitoba and Winnipegosis, the flow of the Nelson River is comparatively uniform throughout the year and the range between maximum and minimum discharges is much smaller than on the majority of rivers. In this respect, the Nelson is similar to the St. Lawrence River, the flow of which is naturally regulated by the Great Lakes.

NELSON RIVER NEAR WARREN LANDING - STATION No. 5UB₂

Location: Lat. 53° 44' 45", long. 97° 53' 55", Manitoba. Gauge: Staff; elevations referred to Geodetic Survey of Canada datum. Period of Record: Elevations only June 1957 to date. Extremes Recorded: Daily - Maximum, 19 July 1957, 714.00 feet, Minimum, 23 November 1957, 711.06 feet.

Daily Elevations in Feet for Water Years 1957 and 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1957												
1.....	-	-	-	-	-	-	-	-	-	13.65	13.90	13.50
2.....	-	-	-	-	-	-	-	-	-	13.75	13.90	13.40
3.....	-	-	-	-	-	-	-	-	-	13.65	13.85	13.40
4.....	-	-	-	-	-	-	-	-	-	13.60	13.85	13.50
5.....	-	-	-	-	-	-	-	-	-	13.65	13.80	13.45
6.....	-	-	-	-	-	-	-	-	-	13.75	13.90	13.35
7.....	-	-	-	-	-	-	-	-	-	13.65	13.70	13.65
8.....	-	-	-	-	-	-	-	-	-	13.25	13.95	14.05
9.....	-	-	-	-	-	-	-	-	-	13.85	13.90	13.85
10.....	-	-	-	-	-	-	-	-	-	13.90	13.60	13.45
11.....	-	-	-	-	-	-	-	-	-	13.85	13.70	13.25
12.....	-	-	-	-	-	-	-	-	-	13.90	13.90	13.15
13.....	-	-	-	-	-	-	-	-	-	13.75	13.80	13.25
14.....	-	-	-	-	-	-	-	-	-	13.80	13.70	13.55
15.....	-	-	-	-	-	-	-	-	-	13.85	13.80	12.95
16.....	-	-	-	-	-	-	-	-	-	13.91	13.80	13.21
17.....	-	-	-	-	-	-	-	-	13.35	13.95	13.82	13.23
18.....	-	-	-	-	-	-	-	-	13.35	13.95	13.70	13.20
19.....	-	-	-	-	-	-	-	-	13.45	14.00	13.73	13.45
20.....	-	-	-	-	-	-	-	-	13.55	13.90	13.70	13.23
21.....	-	-	-	-	-	-	-	-	13.60	13.95	13.97	13.25
22.....	-	-	-	-	-	-	-	-	13.45	13.85	13.60	12.83
23.....	-	-	-	-	-	-	-	-	13.70	13.96	13.53	12.55
24.....	-	-	-	-	-	-	-	-	13.75	13.97	13.70	12.93
25.....	-	-	-	-	-	-	-	-	13.75	13.96	13.15	12.57
26.....	-	-	-	-	-	-	-	-	13.55	13.85	13.30	12.43
27.....	-	-	-	-	-	-	-	-	13.74	13.97	13.55	12.47
28.....	-	-	-	-	-	-	-	-	13.60	13.96	13.55	12.40
29.....	-	-	-	-	-	-	-	-	13.60	13.85	13.65	-
30.....	-	-	-	-	-	-	-	-	13.60	13.85	13.60	-
31.....	-	-	-	-	-	-	-	-	-	13.75	13.55	-
1957-58												
1.....	13.05	12.52	12.20	12.14	12.02	12.02	12.16	12.00	11.84	11.78	12.42	12.25
2.....	13.45	12.45	12.20	12.12	12.02	12.03	12.16	12.02	11.94	12.00	12.54	12.28
3.....	13.22	12.64	12.22	12.12	12.03	12.02	12.14	11.98	11.96	12.00	12.38	12.22
4.....	13.38	12.42	12.18	12.12	12.02	12.02	12.14	12.00	11.88	11.95	12.28	12.34
5.....	13.22	12.34	12.16	12.10	12.02	12.02	12.14	12.04	11.84	11.40	12.52	12.22
6.....	12.98	12.20	12.20	12.08	12.03	12.02	12.18	12.06	11.76	12.00	12.36	12.20
7.....	12.98	12.08	12.20	12.08	12.03	12.03	12.14	12.04	11.75	12.12	12.38	11.98
8.....	12.90	12.02	12.22	12.08	12.02	12.03	12.14	12.02	11.85	12.20	12.22	12.08
9.....	12.96	12.05	12.20	12.08	12.02	12.04	12.16	12.00	11.94	12.00	12.28	12.22
10.....	13.00	12.88	12.20	12.06	12.03	12.05	12.14	12.06	11.96	11.98	12.28	12.54
11.....	13.05	13.02	12.22	12.06	12.03	12.05	12.12	12.05	11.75	12.10	12.24	12.28
12.....	13.38	12.84	12.22	12.06	12.02	12.06	12.12	12.26	11.60	12.00	12.32	12.18
13.....	13.25	12.62	12.20	12.04	12.02	12.06	12.12	12.24	11.84	11.96	12.34	12.02
14.....	13.05	12.60	12.20	12.02	12.02	12.06	12.10	12.20	11.88	11.65	12.18	12.20
15.....	12.00	12.38	12.20	12.02	12.02	12.06	12.06	12.10	11.84	12.05	12.20	12.18
16.....	12.45	12.24	12.20	12.00	12.03	12.06	12.06	12.06	11.80	12.08	12.26	12.20
17.....	12.88	12.20	12.22	12.00	12.02	12.06	12.08	12.02	11.82	12.14	12.24	12.28
18.....	12.80	12.08	12.20	12.00	12.02	12.07	12.04	11.98	11.90	12.22	12.28	12.22
19.....	12.58	12.04	12.20	12.00e	12.03	12.06	12.02	11.86	11.75	12.25	12.22	12.28
20.....	12.98	11.60	12.20	12.00	12.02	12.06	12.01e	11.75	11.60	12.18	12.16	12.46
21.....	12.25	11.92	12.22	12.01	12.02	12.08	12.00	11.73	11.85	12.20	12.18	11.78
22.....	12.29	13.40	12.20	12.00	12.02	12.10	12.00	11.75	11.78	12.30	12.78	12.22
23.....	12.28	11.06	12.18	12.00	12.03	12.10	11.98	11.78	11.65	12.28	12.52	12.04
24.....	12.38	11.98	12.18	12.00	12.02	12.12	11.96	11.82	11.65	12.36	12.44	11.96
25.....	12.82	11.95	12.18	12.00	12.03	12.12	11.98	11.92	11.75	12.10	12.28	11.94
26.....	12.70	12.05	12.20	12.00	12.02	12.14	11.98	11.90	11.90	12.22	12.32	11.92
27.....	12.45	12.10	12.18	12.01	12.03	12.14	11.96	11.84	12.00	12.18	12.26	12.02
28.....	12.48	12.44	12.16	12.00	12.00	12.14	11.94	11.74	11.82	12.38	12.24	12.00
29.....	12.80	12.28	12.16	12.01	-	12.14	11.98	11.76	11.75	12.42	12.28	11.64
30.....	12.44	12.24	12.16	12.02	-	12.14	11.94	11.78	11.70	12.48	12.34	11.74
31.....	12.95	-	12.14	12.02	-	12.16	-	11.84	-	12.55	12.22	-

Add 700.00 to obtain elevation in feet, Geodetic Survey of Canada datum.

e - Estimated.

NELSON RIVER AT NORWAY HOUSE - STATION No. 5UB₁

Location: Lat. 53° 59', long. 97° 50', Manitoba, near Hudson Bay Company Store. Gauge: Staff; elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. Period of Record: Elevations only September 1913 to May 1933 and October 1947 to date. Extremes Recorded: Daily - Maximum, 7 August 1950, 715.63 feet, Minimum, February 1932, 709.08 feet.

Daily Elevations in Feet for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	13.10	12.15	11.55	11.48	11.27	11.23	11.25	11.65	11.90	11.48	11.92	11.60
2.....	13.05	12.10	11.55	11.45	11.25	11.23	11.25	11.65	11.85	11.58	11.84	11.49
3.....	13.03	12.20	11.60	11.45	11.25	11.20	11.25	11.70	11.95	11.63	11.84	11.51
4.....	13.00	12.25	11.65	11.47	11.26	11.20	11.25	11.73	11.95	11.63	11.86	11.57
5.....	12.95	12.20	11.70	11.50	11.28	11.23	11.25	11.80	11.90	11.58	12.04	11.55
6.....	12.85	12.05	11.70	11.50	11.28	11.23	11.25	11.85	11.80	11.53	11.84	11.58
7.....	12.80	11.75	11.65	11.50	11.27	11.25	11.35	11.80	11.70	11.66	11.55	11.63
8.....	12.80	-	11.60	11.45	11.26	11.25	11.40	11.75	11.63	11.72	11.64	11.39
9.....	12.75	-	11.55	11.45	11.25	11.25	11.45	11.75	11.63	11.74	11.78	11.03
10.....	12.65	-	11.50	11.43	11.25	11.23	11.55	11.75	11.58	11.84	11.80	11.22
11.....	12.75	-	11.55	11.40	11.25	11.20	11.60	11.75	11.53	11.82	11.84	11.28
12.....	12.80	-	11.55	11.40	11.25	11.20	11.65	11.85	11.33	11.83	11.74	11.38
13.....	12.80	-	11.57	11.40	11.20	11.20	11.70	12.05	11.38	11.76	11.78	11.48
14.....	12.95	-	11.60	11.35	11.20	11.23	11.80	12.00	11.43	11.75	11.74	11.63
15.....	12.85	-	11.60	11.35	11.15	11.20	11.80	12.05	11.43	11.55	11.64	11.58
16.....	12.70	-	11.55	11.35	11.20	11.18	11.85	12.05	11.53	11.72	11.64	11.18
17.....	12.55	-	11.55	11.35	11.25	11.20	11.85	12.00	11.48	11.76	11.76	11.13
18.....	12.45	-	11.60	11.30	11.25	11.23	11.80	11.85	11.48	11.81	11.84	11.53
19.....	12.40	-	11.60	11.30	11.25	11.23	11.80	11.70	11.53	11.74	11.74	11.53
20.....	12.35	-	11.55	11.30	11.20	11.25	11.75	11.45	11.53	11.77	11.58	11.53
21.....	-	-	11.50	11.35	11.25	11.25	11.75	11.15	11.53	11.87	11.44	11.48
22.....	-	-	11.50	11.35	11.30	11.25	11.73	11.25	11.53	11.84	11.47	11.43
23.....	-	-	11.50	11.35	11.30	11.25	11.75	11.40	11.40	11.86	11.48	11.28
24.....	-	-	11.50	11.33	11.25	11.25	11.75	11.50	11.27	11.97	11.53	11.33
25.....	-	-	11.50	11.33	11.25	11.25	11.80	11.65	11.23	11.84	11.42	11.38
26.....	-	-	11.48	11.31	11.25	11.25	11.80	11.70	11.33	11.80	11.46	11.43
27.....	12.20	-	11.45	11.31	11.25	11.25	11.75	11.75	11.38	11.86	11.63	11.38
28.....	12.25	11.40	11.45	11.31	11.23	11.25	11.65	11.80	11.38	11.83	11.58	11.33
29.....	12.25	11.45	11.45	11.29	-	11.25	11.65	11.85	11.38	11.71	11.55	11.33
30.....	12.30	11.50	11.45	11.28	-	11.30	11.60	11.95	11.43	11.68	11.53	11.43
31.....	12.25	-	11.50	11.28	-	11.30	-	11.95	-	11.80	11.58	-

Add 700.00 to obtain elevation in feet, Geodetic Survey of Canada datum, 1928 adjustment.

Location: Lat. 54° 36', long. 97° 47', Manitoba, at Roman Catholic Mission. **Gauge:** Staff; elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. **Period of Record:** Elevations only June 1920 to August 1933 and July 1950 to date. **Extremes Recorded:** Daily - Maximum, 8 July 1955, 683.39 feet, Minimum, 7 April 1932, 674.13 feet. **Remarks:** Data for period September 1918 to May 1920 were obtained at Hudson Bay Company Post, Station No. 5UD₃.

Daily Elevations in Feet for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	-	79.79	78.30	77.72	77.54	77.39	76.91	77.70	78.55	78.62	78.92	78.66
2.....	-	79.80	78.29	77.72	77.54	77.38	76.93	77.72	78.57	78.63	78.89	78.77
3.....	-	79.78	78.27	77.73	77.53	77.37	76.95	77.75	78.67	78.59	78.97	78.68
4.....	80.20	79.77	78.26	77.73	77.51	77.36	76.96	77.75	78.72	78.63	79.00	78.72
5.....	80.17	79.76	78.26	77.74	77.49	77.36	76.98	77.76	78.76	78.72	78.97	78.81
6.....	80.20	79.70	78.27	77.75	77.49	77.35	76.98	77.76	78.78	78.59	78.97	78.81
7.....	80.30	79.74	78.28	77.77	77.45	77.36	76.99	77.79	78.84	78.47	79.02	78.82
8.....	80.20	79.70	78.22	77.75	77.44	77.36	76.98	77.81	78.88	78.41	79.02	78.82
9.....	80.20	79.60	78.21	77.73	77.42	77.35	76.99	77.83	78.93	78.61	78.97	78.81
10.....	80.20	79.40	78.20	77.72	77.41	77.34	77.02	78.33	78.94	78.59	78.95	78.83
11.....	80.20	79.39	78.15	77.70	77.41	77.33	77.06	78.33	78.95	78.69	78.99	78.67
12.....	80.30	79.30	78.11	77.69	77.41	77.31	77.07	78.34	78.95	78.65	78.97	78.62
13.....	80.24	79.29	78.05	77.68	77.40	77.28	77.09	78.36	78.98	78.76	78.99	78.67
14.....	80.22	79.25	77.89	77.68	77.40	77.26	77.15	78.39	78.93	78.83	79.02	79.02
15.....	80.20	79.20	77.79	77.67	77.40	77.25	77.20	78.43	78.87	78.69	78.97	79.07
16.....	80.30	79.17	77.80	77.67	77.40	77.24	77.25	78.45	78.88	78.64	78.97	78.57
17.....	80.31	79.15	77.82	77.66	77.39	77.24	77.30	78.48	78.86	78.75	78.97	78.47
18.....	80.23	79.10	77.80	77.66	77.39	77.23	77.36	78.57	78.83	78.76	78.90	78.40
19.....	80.20	79.10	77.79	77.65	77.39	77.23	77.41	78.67	78.83	78.79	78.87	78.47
20.....	80.17	79.09	77.79	77.66	77.39	77.22	77.46	78.67	78.81	78.82	78.89	78.57
21.....	80.23	79.03	77.78	77.65	77.39	77.21	77.48	78.57	78.76	78.83	78.92	78.57
22.....	80.21	78.94	77.75	77.65	77.38	77.20	77.50	78.57	78.72	78.93	78.85	78.57
23.....	80.16	78.89	77.79	77.64	77.37	77.19	77.54	78.32	78.72	78.92	78.85	78.52
24.....	80.11	78.86	77.76	77.64	77.38	77.17	77.58	78.52	78.92	78.99	78.77	78.64
25.....	80.09	78.60	-	77.64	77.38	77.15	77.59	78.42	78.72	79.05	78.84	78.62
26.....	80.00	78.48	77.75	77.63	77.37	77.14	77.59	78.67	78.58	78.99	78.82	78.58
27.....	79.90	78.29	77.74	77.61	77.37	77.12	77.60	78.54	78.42	78.92	78.83	78.52
28.....	79.88	78.23	77.74	77.60	77.38	77.10	77.64	78.39	78.57	79.00	78.80	78.57
29.....	79.86	78.19	77.73	77.58	-	77.09	77.67	78.57	78.61	78.99	78.76	78.62
30.....	79.80	78.25	77.73	77.57	-	77.00	77.68	78.48	78.52	78.97	78.76	78.52
31.....	79.79	-	77.72	77.55	-	76.94	-	78.54	-	78.95	78.68	-

Add 600.00 to obtain elevation in feet, Geodetic Survey of Canada datum, 1928 adjustment.

NELSON RIVER BELOW SIPIWESK LAKE - STATION No. 5UE4

Location: Lat. 55° 13' 24", long. 97° 13' 06", Manitoba, four miles below Sipiwesik Lake. Drainage Area: 389,000 square miles (including 8,600 square miles of Johnstone Lake area). Gauge: Recording; elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. Measurement of Discharge: From boat. Period of Record: July 1951 to date. Average Discharge: (44 years) - 72,000 cfs. Extremes Recorded: Daily - Maximum, 21 July 1955, 136,000 cfs (elevation 604.15 ft.), Minimum, 9 January 1941, 25,600 cfs (discharge measurement); Instantaneous Maximum, 9:00 a.m., 21 July 1955, 136,000 cfs (elevation 604.19 ft.). Remarks: Records good during operation of recorder in open water; fair during all other periods. From July 1914 to July 1951 records of miscellaneous measurements and water levels were obtained at various locations, but insufficient data to compute daily flow. A summary of mean monthly discharge at the outlet of Cross Lake related to the elevation of Lake Winnipeg has been computed and may be obtained upon application to the District Engineer at Winnipeg, for address see page 8.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	96,400	-	-	-	-	-	-	62,700	80,500	79,800	80,600	80,000
2.....	96,200	-	-	-	-	-	-	63,100	80,600	79,600	80,500	80,100
3.....	96,200	-	-	-	-	-	-	63,500	80,900	79,600	80,200	80,200
4.....	96,000	-	-	-	-	-	-	64,000	81,100	79,400	80,200	80,000
5.....	96,600	-	-	-	-	-	-	64,500	81,400	79,200	80,400	79,700
6.....	96,300	-	-	-	-	-	-	64,900	81,600	79,600	80,500	79,600
7.....	95,900	-	-	-	-	-	-	65,600	81,500	79,800	80,400	79,600
8.....	96,200	-	-	-	-	-	-	66,300	81,700	79,600	80,600	79,600
9.....	96,400	-	-	-	-	-	-	67,200	81,800	79,200	80,900	79,400
10.....	96,200	-	-	-	-	-	-	67,600	82,200	79,200	80,900	79,400
11.....	96,200	-	-	-	-	-	-	68,300	82,200	79,000	81,100	79,500
12.....	96,000	-	-	-	-	-	-	68,800	82,600	78,900	81,200	79,400
13.....	95,800	-	-	-	-	-	-	69,200	82,200	78,600	81,000	79,300
14.....	95,800	-	-	-	-	-	-	69,800	82,200	78,400	81,000	79,200
15.....	95,900	-	-	-	-	-	-	70,600	82,400	78,800	80,800	79,800
16.....	95,800	-	-	-	-	-	-	71,500	82,400	78,700	81,000	80,800
17.....	95,600	-	-	-	-	-	-	72,200	82,300	78,600	81,000	80,900
18.....	95,600	-	-	-	-	-	-	73,000	82,300	78,700	80,900	80,900
19.....	95,400	-	-	-	-	-	-	73,800	82,300	78,800	80,800	80,600
20.....	95,400	-	-	-	-	-	-	74,500	82,200	78,800	80,600	80,400
21.....	94,700	-	-	-	-	-	-	75,400	82,200	79,000	80,400	80,500
22.....	95,000	-	-	-	-	-	-	76,400	81,900	79,000	80,200	80,400
23.....	95,400	-	-	-	-	-	-	77,400	81,500	79,500	80,200	80,100
24.....	95,200	-	-	-	-	-	-	78,200	80,800	79,800	80,200	79,700
25.....	94,900	-	-	-	-	-	-	78,400	80,900	80,100	80,000	79,500
26.....	94,400	-	-	-	-	-	-	78,900	81,200	80,100	80,000	79,500
27.....	94,100	-	-	-	-	-	-	79,200	81,200	80,100	80,000	79,600
28.....	93,700e	-	-	-	-	-	-	79,600	80,600	80,200	80,200	80,000
29.....	93,400e	-	-	-	-	-	-	80,100	80,400	80,200	79,900	80,400
30.....	93,000e	-	-	-	-	-	-	80,400	80,200	80,200	79,900	80,200
31.....	92,600e	-	-	-	-	-	-	80,400	-	80,400	80,000	-
Mean	95,400	80,000e	65,000e	58,000e	54,000e	53,000e	56,000e	71,800	81,600	79,400	80,500	79,900
Per sq. mi.	0.25	0.21	0.17	0.15	0.14	0.14	0.14	0.18	0.21	0.20	0.21	0.21
Acre-feet in 1,000	5,864	4,760	3,997	3,566	2,999	3,259	3,332	4,414	4,854	4,881	4,950	4,750

The Year.....Discharge: Daily - Maximum 5 October, 96,600 (elevation 597.37)
Instantaneous Maximum 5 October, 10 p.m., 96,700 (elevation 597.40)
Mean 71,300; Per Square Mile 0.18
Runoff: Acre-feet 51,626,000; Depth in inches on drainage area 2.50

e - Estimated.

Mean monthly flows November to April by Lake Winnipeg stage relation and discharge measurements.

Location: Lat. 54° 47' 10", long. 99° 58' 10", Manitoba. Drainage Area: 1,260 square miles. Gauge: Staff. Measurement of Discharge: From bridge. Period of Record: June 1957 to date. Extremes Recorded: Daily - Maximum, 13 June 1958, 576 cfs, Minimum, 7, 11, 13, 22 November and 4 December 1957, 158 cfs. Remarks: Records good during open water periods; fair during ice periods.

Daily Discharge in Cubic Feet per Second for Water Year 1956-57

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	-	-	-	-	-	-	-	-	-	365	334	234
2.....	-	-	-	-	-	-	-	-	-	365	334	213
3.....	-	-	-	-	-	-	-	-	-	398	334	234
4.....	-	-	-	-	-	-	-	-	-	398	334	213
5.....	-	-	-	-	-	-	-	-	-	398	334	213
6.....	-	-	-	-	-	-	-	-	-	398	334	213
7.....	-	-	-	-	-	-	-	-	-	398	365	213
8.....	-	-	-	-	-	-	-	-	-	365	334	213
9.....	-	-	-	-	-	-	-	-	-	432	306	234
10.....	-	-	-	-	-	-	-	-	-	432	306	234
11.....	-	-	-	-	-	-	-	-	-	468	306	213
12.....	-	-	-	-	-	-	-	-	-	468	306	213
13.....	-	-	-	-	-	-	-	-	-	468	306	213
14.....	-	-	-	-	-	-	-	-	-	468	306	234
15.....	-	-	-	-	-	-	-	-	-	432	306	213
16.....	-	-	-	-	-	-	-	-	-	432	280	213
17.....	-	-	-	-	-	-	-	-	-	398	280	232
18.....	-	-	-	-	-	-	-	-	334	398	280	232
19.....	-	-	-	-	-	-	-	-	365	398	280	230
20.....	-	-	-	-	-	-	-	-	334	398	280	228
21.....	-	-	-	-	-	-	-	-	334	365	256	213
22.....	-	-	-	-	-	-	-	-	306	398	256	230
23.....	-	-	-	-	-	-	-	-	306	398	256	211
24.....	-	-	-	-	-	-	-	-	365	365	213	217
25.....	-	-	-	-	-	-	-	-	365	365	234	204
26.....	-	-	-	-	-	-	-	-	334	365	256	207
27.....	-	-	-	-	-	-	-	-	365	365	256	226
28.....	-	-	-	-	-	-	-	-	398	365	280	209
29.....	-	-	-	-	-	-	-	-	398	365	280	205
30.....	-	-	-	-	-	-	-	-	365	334	234	230
31.....	-	-	-	-	-	-	-	-	-	334	234	-
Mean	-	-	-	-	-	-	-	-	-	397	290	220
Per sq. mi.	-	-	-	-	-	-	-	-	-	0.32	0.23	0.18
Acre-feet	-	-	-	-	-	-	-	-	-	24,390	17,850	13,060

The Period..... Discharge: Daily - Maximum 11 July, 468
(92 days) - Minimum 25 September, 204

Mean 303; Per Square Mile 0.24

Runoff: Acre-feet 55,300; Depth in inches on drainage area 0.83

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	194	209	185	185	190	194	204	415	504	415	280	245
2.....	205	<u>183</u>	176	176	194	204	204	432	504	432	256	256
3.....	230	185	169	172	<u>190</u>	204	190	415	486	450	256	<u>245</u>
4.....	232	183	158	176	190	194	<u>194</u>	425	504	<u>432</u>	293	234
5.....	<u>228</u>	183	<u>165</u>	172	185	<u>190</u>	194	425	497	415	280	234
6.....	232	190	172	176	185	194	204	<u>398</u>	504	415	256	224
7.....	230	158	176	176	190	194	194	398	504	382	256	<u>213</u>
8.....	202	185	176	185	185	209	209	415	522	398	280	<u>224</u>
9.....	198	183	172	190	180	209	204	425	533	382	293	213
10.....	194	187	176	176	190	213	209	432	522	382	293	213
11.....	230	158	172	167	194	204	213	432	540	415	280	224
12.....	202	<u>165</u>	169	<u>172</u>	190	209	224	450	558	425	280	234
13.....	205	158	176	180	190	209	230	432	576	432	293	245
14.....	205	162	172	183	185	204	234	461	<u>504</u>	382	<u>306</u>	234
15.....	209	165	167	183	194	204	245	486	522	365	<u>293</u>	245
16.....	209	162	172	176	190	209	306	504	504	365	306	256
17.....	205	165	176	180	185	209	280	533	558	359	256	245
18.....	209	162	172	190	194	213	306	533	522	382	268	245
19.....	183	169	176	194	190	224	334	540	504	365	256	234
20.....	190	169	172	<u>190</u>	185	<u>230</u>	382	<u>558</u>	486	365	268	234
21.....	187	190	167	190	185	213	382	558	486	334	256	245
22.....	<u>165</u>	158	172	194	176	213	365	522	415	398	245	234
23.....	<u>176</u>	190	176	190	<u>185</u>	217	385	504	425	334	234	224
24.....	190	183	180	185	185	224	382	486	425	280	245	224
25.....	181	169	172	190	176	224	425	468	415	280	234	234
26.....	185	169	167	190	176	213	425	450	415	256	234	224
27.....	190	172	172	194	185	209	415	522	425	<u>275</u>	245	230
28.....	169	172	176	194	176	209	425	497	415	293	234	230
29.....	187	172	172	185	-	213	425	486	398	280	245	224
30.....	183	172	180	185	-	204	<u>432</u>	468	415	293	<u>224</u>	224
31.....	167	-	<u>190</u>	176	-	204	-	497	-	293	234	-
Mean	199	174	173	183	186	208	294	470	486	364	264	233
Per sq. mi.	0.16	0.14	0.14	0.15	0.15	0.17	0.23	0.37	0.39	0.29	0.21	0.18
Acre-feet	12,240	10,370	10,660	11,250	10,350	12,820	17,500	28,090	28,930	22,360	16,220	13,860

The Year..... Discharge: Daily - Maximum 13 June, 576

- Minimum 4 December, 158

Mean 270; Per Square Mile 0.21

Runoff: Acre-feet 195,400; Depth in inches on drainage area 2.93

Location: Lat. 55° 44' 30", long. 97° 54' 00", Manitoba. Drainage Area: 6,310 square miles. Gauge: Staff. Measurement of Discharge: From boat. Period of Record: September 1957 to date. Extremes Recorded: Daily - Maximum, 14 June 1958, 5,950 cfs, Minimum, 13 February 1958, 720 cfs. Remarks: Records good during open-water periods; fair during ice periods.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	2,540	2,010	1,520	1,140	825	741	769	3,130	5,780	4,500e	3,760e	2,280
2.....	2,510	1,990	1,500	1,140	811	748	776	3,320	5,780		3,730e	2,280
3.....	2,490	1,970	1,480	1,130	790	755	776	3,500	5,810		3,700e	2,230
4.....	2,440	1,950	1,460	1,120	783	755	769	3,540	5,850		3,670e	2,230
5.....	2,470	1,940	1,460	1,110	783	755	769	3,640	5,850		3,640e	2,180
6.....	2,440	1,900	1,440	1,100	790	755	776	3,790	5,880	4,500e	3,600e	2,180
7.....	2,400	1,900	1,440	1,080	790	755	790	3,920	5,860		3,550e	2,190
8.....	2,430	1,890	1,420	1,070	797	755	797	3,990	5,880		3,510e	2,180
9.....	2,390	1,880	1,420	1,060	769	762	839	4,070	5,880		3,470e	2,180
10.....	2,370	1,860	1,400	1,050	755	776	874	4,180	5,880		3,430	2,140
11.....	2,340	1,840	1,380	1,040	741	790b	895	4,310	5,900	4,170e	3,360	2,200
12.....	2,290	1,840	1,370	1,030	727	825	902	4,470	5,900		3,360	2,180
13.....	2,300	1,820	1,340	1,020	720	825	923	4,630	5,930		3,290	2,180
14.....	2,260	1,790	1,340	1,020	727	832	1,160	4,660	5,950		3,240	2,130
15.....	2,260	1,790	1,320	1,000	741	839	1,360	4,720	5,900		3,160	2,280
16.....	2,250	1,780	1,300	993	755	839	1,480	4,880	5,790	4,170e	3,160	2,570
17.....	2,240	1,750	1,300	986	762	846	1,640	4,920	5,760		3,090	2,910
18.....	2,250	1,730	1,290	979	755	846	1,790	4,960	5,710		3,030	2,770
19.....	2,180	1,710	1,280	965	783	839	1,940	5,020e	5,640		3,030	2,960
20.....	2,220	1,700	1,280	951	790	832	1,980	5,080	5,540		3,040	3,160
21.....	2,100	1,690	1,260	944	783	811	2,030	5,110	5,480	3,880e	2,930	3,290
22.....	2,150	1,670	1,240	930	769	804	2,080	5,160	5,380		2,900	3,500
23.....	2,140	1,680	1,220	916	762	790	2,160	5,160	5,320		2,720	3,530
24.....	2,100	1,670	1,220e	902	762	783	2,280	5,200	5,220		2,650	3,680
25.....	2,070	1,650	1,210b	895	755	776	2,400	5,250	5,200		2,640	3,840
26.....	2,040	1,610	1,190	895	755	776	2,570	5,360	5,160	3,880e	2,640	3,980
27.....	2,010	1,590	1,180	888	748	762	2,680	5,610	5,000		2,570	3,990
28.....	1,990	1,610	1,180	881	741	755	2,870	5,540	4,900		2,570	4,000
29.....	2,010	1,580	1,170	867	-	755	3,020	5,730	4,820e		2,510	4,050
30.....	1,980	1,550	1,160	853	-	748	3,080	5,710	4,740e		2,460	4,160
31.....	2,020	-	1,150	839	-	755	-	5,760	-		2,390	-
Mean	2,250	1,780	1,320	993	767	787	1,570	4,660	5,590	4,170e	3,120	2,850
Per sq. mi.	0.36	0.28	0.21	0.16	0.12	0.12	0.25	0.74	0.89	0.66	0.49	0.45
Acre-feet	138,200	105,800	80,160	61,080	42,580	48,370	93,570	286,300	332,600	256,600	192,000	169,400

The Year..... Discharge: Daily - Maximum 14 June, 5,950

- Minimum 13 February, 720

Mean 2,500; Per Square Mile 0.40

Runoff: Acre-feet 1,808,000; Depth in inches on drainage area 5.35

b - Ice conditions 25 December to 11 March.

e - Estimated.

MISCELLANEOUS DISCHARGE MEASUREMENTS MADE IN NELSON RIVER BASIN FOR THE YEAR 1958

Date	Stream	Location	Discharge cfs
19 June	Grass River	At Standing Stone Falls, Manitoba	1,890
14 Aug.	"	"	2,130
24 Sept.	"	"	1,990
17 Feb.	Grass River	Below Teal Lake	627b

b - Ice condition.

LAKE WINNIPEG TRIBUTARY BASIN

LAKE WINNIPEG AT WINNIPEG BEACH - STATION No. 5SB₁

Location: Lat. 50° 30' 22", long. 96° 57' 55", in NW. 1/4 sec. 34, tp. 17, rge. 4, E. 1st Mer., Manitoba. Gauge Staff; elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. Period of Record: May 1913 to date. Extremes Recorded: Daily - Maximum, 19 August 1950, 718.50 feet, Minimum, 29 October 1940, 708.31 feet.

Daily Elevations in Feet for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	3.04	3.85	2.90	2.65	2.70	2.60	2.40	-	2.88	2.51	2.86	2.45
2.....	2.90	3.65	2.80	2.62	2.60	2.60	2.52	-	2.35	2.61	3.30	1.80
3.....	2.35	3.00	2.70	2.62	2.50	2.60	2.58	3.50	2.75	2.57	2.73	3.35
4.....	2.95	3.02	2.80	2.60	2.82	2.65	2.61	2.60	3.00	2.77	2.83	2.33
5.....	2.76	2.45	2.70	2.50	2.65	2.75	2.65	2.70	3.95	2.89	2.55	2.31
6.....	3.85	3.25	2.80	2.80	2.65	2.70	2.61	2.40	2.75	2.32	2.89	2.30
7.....	4.00	4.02	2.65	2.45	2.58	2.60	2.48	2.70	3.03	3.27	2.91	3.50
8.....	4.93	4.00	2.80	2.60	2.55	2.50	2.62	2.78	3.08	1.52	1.86	1.83
9.....	3.90	3.70	2.82	2.61	2.65	2.61	2.58	2.50	2.55	1.77	3.11	3.35
10.....	3.90	-	2.90	2.72	2.68	2.60	2.48	2.79	4.02	2.42	2.86	1.83
11.....	2.92	3.00	2.60	2.55	2.75	2.52	2.80	2.65	3.02	2.92	2.61	0.88
12.....	2.65	2.45	2.65	2.60	2.60	2.53	2.55	2.58	3.65	2.80	3.51	2.35
13.....	2.60	3.20	2.80	2.76	2.65	2.64	2.51	-	2.65	2.17	2.53	1.77
14.....	2.42	3.35	2.75	2.70	2.59	2.60	2.48	2.90	2.85	3.87	3.15	1.45
15.....	3.00	3.45	2.80	2.56	2.51	2.60	2.68	2.55	2.78	2.91	2.86	1.75
16.....	4.03	3.05	2.65	2.70	2.60	2.70	2.52	2.45	2.75	2.37	2.81	1.25
17.....	3.06	2.85	2.64	2.60	2.56	2.74	2.45	2.80	2.25	2.22	2.26	1.70
18.....	3.04	2.55	2.55	2.70	2.60	2.65	2.50	4.70	2.75	3.32	2.54	1.80
19.....	3.06	3.00	2.80	2.78	2.40	2.67	2.42	4.40	3.54	2.82	2.56	1.49
20.....	2.88	3.90	2.60	2.50	2.48	2.60	2.75	3.50	3.05	2.58	2.86	1.90
21.....	2.98	4.01	2.80	2.60	2.60	2.56	2.80	2.70	2.65	2.54	2.88	1.87
22.....	4.03	3.90	2.80	2.70	2.52	2.59	2.70	3.60	3.00	2.87	2.56	1.85
23.....	3.69	4.01	2.90	2.55	2.49	2.56	2.82	2.35	3.04	2.65	2.86	2.70
24.....	4.00	4.00	2.50	2.60	2.68	2.56	2.84	3.02	3.00	2.90	2.86	3.85
25.....	3.05	2.95	2.73	2.75	2.40	2.58	2.76	2.48	3.75	2.87	2.78	2.30
26.....	3.01	2.80	2.70	2.70	2.80	2.55	2.58	2.07	2.85	2.77	2.31	1.89
27.....	2.65	3.02	2.85	2.70	2.75	2.55	2.40	4.40	2.08	2.65	2.64	2.50
28.....	2.75	2.80	2.79	2.62	2.70	2.51	4.80	2.38	2.16	2.91	2.75	1.86
29.....	2.35	3.00	2.75	2.60	-	2.51	3.38	3.04	2.97	3.67	2.86	2.75
30.....	3.80	2.70	2.65	2.64	-	2.50	2.80	2.96	2.43	2.85	3.61	3.60
31.....	2.35	-	2.60	2.72	-	2.42	-	3.03	-	1.89	2.51	-

Add 710.00 to obtain elevation in feet, Geodetic Survey of Canada datum, 1928 adjustment.

Location: Lat. 52° 21' 26", long. 97° 00' 58", Manitoba, at Hudson Bay Company Dock, mouth of Berens River. Gauge: Staff; recording from 22 July 1958, elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. Period of Record: January 1914 to date. Extremes Recorded: Daily - Maximum, August and September 1927, 717.31 feet, Minimum, December 1940, 708.51 feet.

Daily Elevations in Feet for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	3.80x	3.20	2.60	2.55	2.55	2.45	2.30	2.46	2.48	2.46	2.75	2.00
2.....	3.62	2.80	2.60	2.55	-	2.40	2.35	2.60	2.47	2.44	2.81	2.94
3.....	3.30	2.78	2.56	2.52	2.49	2.42	2.40	2.44	2.56	2.50	2.69	2.60
4.....	3.00	3.05	2.52	2.45	2.45	2.42	2.42	2.42	2.60	2.22	2.61	2.38
5.....	3.35	3.00	2.62	2.51	2.50	2.44	2.41	2.48	2.47	2.12	3.18	2.28
6.....	3.25	2.95	2.58	2.52	2.52	2.40	2.42	2.48	2.50	2.35	3.10	2.50
7.....	3.28	2.80	2.56	2.49	2.50	2.37	2.43	2.54	2.64	2.64	2.61	2.37
8.....	3.28	2.78	2.60	2.48	2.48	2.40	2.40	2.49	2.60	2.61	2.69	2.34
9.....	3.18	2.78	2.60	2.55	2.53	2.39	2.39	2.30	2.48	2.67	2.65	2.25
10.....	3.28	2.80	2.56	2.48	2.55	2.39	2.40	2.53	2.60	2.64	2.67	1.93
11.....	3.22	2.65	2.60	2.50	2.51	2.43	2.41	2.53	3.02	2.46	2.69	2.39
12.....	3.32	2.78	2.60	2.55	2.44	2.40	2.39	2.40	2.88	2.68	2.75	2.11
13.....	3.45	2.62	2.58	2.55	2.45	2.45	2.40	2.52	2.51	2.58	2.71	1.85
14.....	3.20	2.55	2.54	2.38	2.50	2.39	2.40	2.68	2.54	2.82	2.80	2.29
15.....	3.15	2.62	2.60	2.40	2.40	2.41	2.38	2.55	2.50	2.65	2.68	2.15
16.....	3.12	2.68	2.58	2.50	2.40	2.40	2.44	2.58	2.50	2.59	2.69	2.04
17.....	3.20	2.70	2.51	2.45	2.38	2.40	2.46	2.52	2.48	2.95	2.54	1.93
18.....	3.20	2.70	2.50	2.50	2.39	2.43	2.38	2.62	2.49	2.75	2.63	2.24
19.....	3.18	2.75	2.59	2.55	2.40	2.43	2.48	2.70	2.75	2.66	2.62	2.14
20.....	3.05	2.65	2.50	2.50	2.42	2.40	2.48	2.65	2.50	2.55	2.61	2.44
21.....	3.02	2.48	2.50	2.55	2.45	2.38	2.45	2.48	2.49	2.80	2.50	2.68
22.....	2.92	2.28	2.65	2.52	2.38	2.39	2.46	2.55	2.40	2.66x	2.44	2.30
23.....	2.90	2.95	2.60	2.50	2.39	2.40	2.50	2.59	2.40	2.82	2.22	2.06
24.....	2.95	2.65	2.49	2.50	2.39	2.42	2.47	2.49	2.58	2.78	2.46	2.08
25.....	3.25	2.55	2.55	2.45	2.40	2.40	2.48	2.47	2.58	2.90	2.36	2.17
26.....	2.98	2.70	2.50	2.45	2.40	2.40	2.45	2.58	2.50	2.85	2.11	2.08
27.....	2.88	2.80	2.55	2.50	2.45	2.40	2.51	2.60	2.50	2.82	2.40	2.20
28.....	2.88	2.95	2.62	2.50	2.40	2.40	2.47	2.44	2.35	2.97	2.20	2.00
29.....	2.90	2.62	2.60	2.54	-	2.40	2.44	2.46	2.41	3.03	2.10	1.93
30.....	2.88	2.60	2.57	2.50	-	2.38	2.68	2.42	2.38	2.79	2.11	2.02
31.....	3.50	-	2.54	2.50	-	2.35	-	2.44	-	2.82	2.11	-

Add 710.00 to obtain elevation in feet, Geodetic Survey of Canada datum, 1928 adjustment;
 x - Staff gauge readings, 1 October to 22 July.

LAKE WINNIPEG AT MISSION POINT - STATION No. 5SG₁

Location: Lat. 53° 11' 00", long. 99° 13' 30", Manitoba, at outlet of Saskatchewan River to Lake Winnipeg. Gauge: Recording; elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. Period of Record: June 1953 to date. Extremes Recorded: Daily - Maximum, 7 July 1955, 717.78 feet, Minimum, 30 September 1958, 712.69 feet. Remarks: Records supplied by Manitoba Water Resources Branch.

Daily Elevations in Feet for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	4.76	-	3.61x	-	-	-	-	-	3.80	3.73	3.77	4.15
2.....	4.94	-	-	-	3.66x	3.25x	-	-	4.00	3.69	3.58	3.67
3.....	4.34	4.01x	-	3.76x	-	-	-	-	3.75	3.58	3.96	3.20
4.....	5.15	-	-	-	-	-	-	-	3.44	3.75	4.15	3.49
5.....	4.77	-	-	-	-	-	-	-	3.60	4.20	3.53	3.59
6.....	4.61	-	-	-	-	-	3.53x	-	3.77	3.64	3.38	3.44
7.....	4.52	-	-	3.65x	-	-	-	-	3.58	3.76	3.85	3.28
8.....	4.47	-	3.69x	-	-	-	-	-	3.63	3.82	3.99	3.51
9.....	4.47	-	-	-	3.59x	3.53x	-	-	3.75	3.84	3.80	3.19
10.....	4.54	4.09x	-	-	-	-	-	-	3.28	3.83	3.80	3.75
11.....	4.60	-	-	-	-	-	-	3.76x	3.29	3.78	3.92	3.48
12.....	4.69	-	-	3.59x	-	-	-	-	3.37	3.92	3.62	3.41
13.....	4.77	-	-	-	-	-	3.61x	-	3.44	4.17	3.83	4.13
14.....	4.78	-	-	-	-	-	-	-	3.63	3.56	3.54	3.60
15.....	4.58	-	3.69x	-	-	-	-	-	3.58	3.80	3.69	3.68
16.....	4.50	-	-	-	3.63x	3.53x	-	-	3.63	3.96	3.78	3.52
17.....	4.49	-	-	-	-	-	-	-	3.65	3.89	3.88	3.82
18.....	4.49	-	-	-	-	-	-	-	3.58	3.66	3.87	3.79
19.....	4.49	-	-	3.21x	-	-	-	-	3.24	3.95	3.47	3.52
20.....	4.47	-	-	-	-	-	-	3.52	3.56	3.98	3.53	3.48
21.....	4.61	-	-	-	3.60x	-	3.56x	3.42	3.65	3.91	3.53	2.80
22.....	4.40	-	-	-	-	-	-	3.50	3.62	3.94	3.71	3.19
23.....	4.25	-	3.69x	-	3.57x	3.59x	-	3.74	3.41	3.89	3.76	3.25
24.....	4.13	-	-	-	-	3.57x	-	3.61	3.39	3.65	3.46	2.94
25.....	4.03	-	-	-	-	-	-	3.08	3.24	3.60	3.61	3.22
26.....	4.07	-	-	-	-	-	-	3.70	3.55	3.64	3.96	3.28
27.....	4.21	-	-	3.50x	-	-	-	3.57	3.68	3.91	4.05	3.08
28.....	-	-	-	-	-	-	-	3.86	3.63	3.56	3.72	3.32
29.....	-	-	3.65x	-	-	-	-	3.73	3.52	3.97	3.77	3.21
30.....	-	-	-	-	-	3.57x	-	3.72	-	3.73	3.60	2.69
31.....	-	-	-	-	-	-	-	3.71	-	3.97	3.76	-

Add 710.00 to obtain elevation in feet, Geodetic Survey of Canada datum, 1928 adjustment.
 x - Staff gauge readings.

Location: Lat. 50° 05' 25", long. 96° 25' 46", on eastboundary of NE. 1/4 sec. 9, tp. 13, rge. 8, E. 1st Mer., Manitoba, at bridge three and one-half miles east and two miles north of Beausejour. Drainage Area: 594 square miles. Gauge: Staff; elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. Measurement of Discharge: From bridge or by wading. Period of Record: Open water 1942 to 1957 and continuous October 1957 to date. Extremes Recorded: Daily - Maximum, 11 May 1950, 3,510 cfs (elevation 758.47 ft.), Minimum, Nil at various times. Remarks: Records good during open-water periods; fair during ice periods. Formerly referred to as "at Greenbay, Manitoba". Continuous records from 1912 to 1922 and open water from 1923 to 1931 were obtained at St. Ouens, Station No. 5SA₁.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	11	10	4	2	1	1	81	8	2	2	169	11
2.....	11	10	4	2	1	1	78	8	2	2	132	10
3.....	10	10	4	2	1	1	75	8	2	2	120	10
4.....	10	11	4	2	1	1	65	10	4	9	106	12
5.....	10	11	4	2	1	1	60	20	3	16	106	10
6.....	6	10	4	2	1	1	75	15	3	171	94	10
7.....	4	10	4	2	1	1	68	12	2	181	80	10
8.....	4	14	4	2	1	1	54	10	2	229	74	9
9.....	5	17	4	2	1	1	43	20	2	231	68	9
10.....	6	25	4	2	1	1	43	18	2	233	64	8
11.....	5	22	3	2	1	1	44	15	2	222	61	7
12.....	5	20	3	2	1	1	43b	16	2	217	53	7
13.....	8	18	3	2	1	1	32	13	2	222	50	7
14.....	13	16b	3	2	1	1	30	10	2	248	46	8
15.....	10	11	3	1	1	1	23	10	2	267	40	8
16.....	12	10	3	1	1	1	16	10	2	274	38	7
17.....	13	9	3	1	1	1	15	7	1	274	30	7
18.....	13	8	3	1	1	1	14	6	1	272	30	7
19.....	12	7	3	1	1	1	12	6	2	266	27	6
20.....	12	6	3	1	1	1	12	5	2	243	22	6
21.....	12	5	3	1	1	1	12	5	1	221	22	6
22.....	12	5	3	1	1	1	14	5	1	256	22	5
23.....	12	5	3	1	1	1	12	5	1	295	19	5
24.....	12	5	3	1	1	1	7	7	1	298	16	5
25.....	12	5	3	1	1	1	7	4	1	407	11	5
26.....	12	5	3	1	1	1	6	4	1	330	12	5
27.....	12	5	3	1	1	1	6	4	1	295	12	5
28.....	12	5	3	1	1	31	5	4	2	278	12	5
29.....	12	4	2	1	-	76	10	4	2	250	11	5
30.....	11	4	2	1	-	89	9	3	2	223	11	6
31.....	10	-	2	1	-	79	-	2	-	197	11	-
Mean	10.0	10.1	3.2	1.5	1.0	9.7	32.4	8.8	1.8	214	51	7.4
Per sq. mi.	0.017	0.017	0.005	0.003	0.002	0.016	0.055	0.015	0.003	0.360	0.086	0.012
Acre-feet	613	601	198	89	56	599	1,930	543	109	13,150	3,110	438

The Year..... Discharge: Daily - Maximum 25 July, 407 (elevation 751.02)

- Minimum 26 June, 1 (elevation 747.40)

Mean 29.6; Per Square Mile 0.051

Runoff: Acre-feet 21,440; Depth in inches on drainage area 0.676

b - Ice conditions 14 November to 12 April.

Location: Lat. 50° 57' 35", long. 97° 02' 10", Manitoba, on river road three miles southwest of Riverton. Drainage Area: 460 square miles. Gauge: Wire-weight. Measurement of Discharge: From bridge and by wading. Period of Record: Open water May 1958 to date. Extremes Recorded: Daily - Maximum, 7 July 1958, 680 cfs, Minimum, 17, 28 to 30 June and 20 to 23 August 1958, 7 cfs. Remarks: Records good.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	-	-	10	9	13	13	10	15	-
2.....	-	-	-	-	-	10	8	16	13	10	15	-
3.....	-	-	-	-	-	10	8	12	11	10	14	-
4.....	-	-	-	-	-	10	12	12	10	10	14	-
5.....	-	-	-	-	-	10	274	12	10	11	13	-
6.....	-	-	-	-	-	9	588	12	9	11	12	-
7.....	-	-	-	-	-	9	680	10	9	11	9	-
8.....	-	-	-	-	-	9	502	10	10	11	12	-
9.....	-	-	-	-	-	8	322	9	10	10	16	-
10.....	-	-	-	-	-	8	187	10	10	18	16	-
11.....	-	-	-	-	-	9	132	10	10	34	16	-
12.....	-	-	-	-	-	9	100	8	9	32	13	-
13.....	-	-	-	-	-	9	88	8	9	24	15	-
14.....	-	-	-	-	-	8	74	8	10	20	18	-
15.....	-	-	-	-	-	8	68	8	11	20	13	-
16.....	-	-	-	-	-	8	62	8	12	19	-	-
17.....	-	-	-	-	16	7	52	8	11	16	-	-
18.....	-	-	-	-	12	8	46	8	10	15	-	-
19.....	-	-	-	-	12	9	38	8	10	14	-	-
20.....	-	-	-	-	12	9	33	7	10	13	-	-
21.....	-	-	-	-	11	9	26	7	10	15	-	-
22.....	-	-	-	-	11	8	24	7	10	14	-	-
23.....	-	-	-	-	11	8	20	7	10	17	-	-
24.....	-	-	-	-	10	8	20	10	8	18	-	-
25.....	-	-	-	-	10	8	18	13	8	16	-	-
26.....	-	-	-	-	11	9	19	13	9	17	-	-
27.....	-	-	-	-	11	9	19	11	11	18	-	-
28.....	-	-	-	-	12	7	18	11	14	18	-	-
29.....	-	-	-	-	10	7	18	12	11	17	-	-
30.....	-	-	-	-	10	7	17	12	10	16	-	-
31.....	-	-	-	-	10	-	15	13	-	16	-	-
Mean	-	-	-	-	-	8.6	113	10.1	10.3	16.2	-	-
Per sq. mi.	-	-	-	-	-	0.019	0.246	0.022	0.022	0.035	-	-
Acre-feet	-	-	-	-	-	510	6,940	621	611	994	-	-

The Period..... Discharge: Daily - Maximum 7 July 680
 (153 days) - Minimum, various times in June and August 7
 Mean 31.9; Per Square Mile 0.069
 Runoff: Acre-feet 9,680; Depth in inches on drainage area 0.394

FAMILY LAKE AT LITTLE GRAND RAPIDS - STATION No. 5RD₆

33

Location: Lat. 52° 02' 30", long. 95° 27' 30", Manitoba, on Forestry Dock at Little Grand Rapids. Gauge: Staff; elevations referred to Geodetic Survey of Canada (Approx.) - R.C.A.F. datum. Period of Record: June 1957 to date. Extremes Recorded: Daily - Maximum, 23 June 1957, 1,000.61 feet, Minimum, 27 March 1958, 996.69 feet.

Daily Elevations in Feet for Water Years 1957 and 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1957												
1.....	-	-	-	-	-	-	-	-	-	4.90	4.36	3.27
2.....	-	-	-	-	-	-	-	-	-	4.89	4.32	3.24
3.....	-	-	-	-	-	-	-	-	-	4.88	4.30	3.23
4.....	-	-	-	-	-	-	-	-	-	4.86	4.29	3.20
5.....	-	-	-	-	-	-	-	-	-	4.88	4.23	3.16
6.....	-	-	-	-	-	-	-	-	-	4.88	4.20	3.10
7.....	-	-	-	-	-	-	-	-	-	4.88	4.20	3.07
8.....	-	-	-	-	-	-	-	-	-	4.85	4.12	3.05
9.....	-	-	-	-	-	-	-	-	-	4.84	4.06	3.03
10.....	-	-	-	-	-	-	-	-	-	4.82	4.00	3.00
11.....	-	-	-	-	-	-	-	-	-	4.82	3.96	2.94
12.....	-	-	-	-	-	-	-	-	-	4.80	3.92	2.88
13.....	-	-	-	-	-	-	-	-	-	4.77	3.86	2.82
14.....	-	-	-	-	-	-	-	-	-	4.74	3.81	2.76
15.....	-	-	-	-	-	-	-	-	-	4.74	3.78	2.74
16.....	-	-	-	-	-	-	-	-	-	4.74	3.75	2.70
17.....	-	-	-	-	-	-	-	-	-	4.73	3.70	2.66
18.....	-	-	-	-	-	-	-	-	-	4.82	3.65	2.65
19.....	-	-	-	-	-	-	-	-	-	4.80	3.63	2.62
20.....	-	-	-	-	-	-	-	-	-	4.76	3.64	2.58
21.....	-	-	-	-	-	-	-	-	-	4.82	3.64	2.55
22.....	-	-	-	-	-	-	-	-	-	4.80	3.61	2.52
23.....	-	-	-	-	-	-	-	-	4.93	4.77	3.60	2.46
24.....	-	-	-	-	-	-	-	-	4.91	4.72	3.59	2.43
25.....	-	-	-	-	-	-	-	-	4.90	4.66	3.59	2.36
26.....	-	-	-	-	-	-	-	-	4.90	4.60	3.54	2.34
27.....	-	-	-	-	-	-	-	-	4.90	4.54	3.50	2.33
28.....	-	-	-	-	-	-	-	-	4.90	4.50	3.48	2.30
29.....	-	-	-	-	-	-	-	-	4.91	4.48	3.42	2.26
30.....	-	-	-	-	-	-	-	-	4.91	4.46	3.36	2.24
31.....	-	-	-	-	-	-	-	-	-	4.42	3.30	-
1957-58												
1.....	2.23	1.50	1.23	1.07	1.17	1.10	1.08	1.38	2.25	3.19	3.46	3.38
2.....	2.21	1.50	1.22	1.07	1.16	1.10	1.10	1.39	2.30	3.19	3.46	3.37
3.....	2.18	1.49	1.20	1.07	1.16	1.10	1.10	1.40	2.37	3.21	3.45	3.36
4.....	2.15	1.47	1.19	1.07	1.16	1.10	1.10	1.44	2.40	3.23	3.46	3.36
5.....	2.12	1.46	1.18	1.06	1.16	1.10	1.12	1.48	2.43	3.25	3.46	3.35
6.....	2.08	1.45	1.17	1.06	1.16	1.10	1.14	1.49	2.47	3.25	3.49	3.32
7.....	2.06	1.43	1.16	1.06	1.16	1.10	1.12	1.50	2.52	3.30	3.49	3.32
8.....	2.04	1.44	1.15	1.06	1.17	1.10	1.11	1.51	2.56	3.38	3.49	3.31
9.....	2.02	1.43	1.15	1.06	1.17	1.10	1.12	1.54	2.58	3.40	3.49	3.30
10.....	2.00	1.41	1.15	1.06	1.18	1.10	1.10	1.56	2.60	3.40	3.49	3.27
11.....	1.98	1.39	1.14	-	1.19	1.10	1.10	1.58	2.69	3.40	3.50	3.27
12.....	1.96	1.38	1.13	-	1.18	1.10	1.11	1.60	2.80	3.40	3.50	3.27
13.....	1.94	1.37	1.12	-	1.18	1.10	1.11	1.65	2.82	3.40	3.50	3.27
14.....	1.94	1.35	1.12	-	1.18	1.10	1.10	1.67	2.84	3.40	3.50	3.28
15.....	1.91	1.33	1.11	-	1.18	1.10	1.09	1.68	2.87	3.40	3.50	3.26
16.....	1.86	1.33	1.11	-	1.18	1.10	1.12	1.70	2.90	3.40	3.50	3.25
17.....	1.84	1.33	1.11	-	1.18	1.10	1.15	1.71	2.94	3.40	3.50	3.25
18.....	1.82	1.33	1.10	-	1.18	1.10	1.18	1.72	2.97	3.40	3.50	3.25
19.....	1.80	1.33	1.10	-	1.18	1.10	1.24	1.73	2.98	3.45	3.50	3.25
20.....	1.79	1.33	1.10	-	1.18	1.10	1.25	1.73	2.98	3.46	3.45	3.25
21.....	1.75	1.33	1.09	-	1.18	1.10	1.25	1.75	2.98	3.47	3.40	3.20
22.....	1.71	1.33	1.09	-	1.14	1.09	1.25	1.75	3.00	3.46	3.40	3.20
23.....	1.68	1.31	1.09	-	1.11	1.10	1.27	1.78	3.00	3.46	3.40	3.15
24.....	1.65	1.29	1.08	-	1.10	1.10	1.28	1.81	3.04	3.46	3.40	3.15
25.....	1.64	1.27	1.08	-	1.12	1.09	1.29	1.83	3.07	3.47	3.40	3.10
26.....	1.64	1.25	1.08	-	1.11	1.06	1.32	1.85	3.09	3.47	3.37	3.09
27.....	1.64	1.24	1.08	-	1.11	1.01	1.35	2.10	3.11	3.47	3.37	3.05
28.....	1.64	1.24	1.08	1.18	1.11	1.02	1.35	2.18	3.13	3.47	3.37	3.05
29.....	1.59	1.23	1.07	1.19	-	1.03	1.36	2.20	3.16	3.47	3.38	3.02
30.....	1.55	1.23	1.07	1.19	-	1.05	1.37	2.21	3.17	3.47	3.38	2.90
31.....	1.51	-	1.07	1.18	-	1.05	-	2.24	-	3.47	3.38	-

Add 995.68 to obtain elevation in feet. Approximate mean sea level.

BERENS RIVER AT OUTLET OF LONG LAKE - STATION No. 5RD₇

Location: Lat. 52° 12' 20", long. 96° 04' 25", Manitoba, Gauge: None; discharges related to gauge on Family Lake at Little Grand Rapids. Measurement of Discharge: From boat. Period of Record: June 1957 to date. Extremes Recorded: Daily - Maximum, 23 June 1957, 2,950 cfs, Minimum, 27 March 1958, 173 cfs. Remarks: Records fair. Discharge per square mile and runoff depth in inches omitted as this river is one of two outlets from Family Lake.

Daily Discharge in Cubic Feet per Second for Water Year 1956-57

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	-	-	-	-	-	-	-	-	-	2,900	2,150	1,120
2.....	-	-	-	-	-	-	-	-	-	2,880	2,100	1,100
3.....	-	-	-	-	-	-	-	-	-	2,870	2,070	1,100
4.....	-	-	-	-	-	-	-	-	-	2,840	2,060	1,080
5.....	-	-	-	-	-	-	-	-	-	2,870	1,990	1,060
6.....	-	-	-	-	-	-	-	-	-	2,870	1,950	1,020
7.....	-	-	-	-	-	-	-	-	-	2,870	1,950	1,010
8.....	-	-	-	-	-	-	-	-	-	2,820	1,860	1,000
9.....	-	-	-	-	-	-	-	-	-	2,810	1,800	990
10.....	-	-	-	-	-	-	-	-	-	2,780	1,730	975
11.....	-	-	-	-	-	-	-	-	-	2,780	1,690	945
12.....	-	-	-	-	-	-	-	-	-	2,750	1,650	915
13.....	-	-	-	-	-	-	-	-	-	2,710	1,590	885
14.....	-	-	-	-	-	-	-	-	-	2,670	1,540	855
15.....	-	-	-	-	-	-	-	-	-	2,670	1,510	845
16.....	-	-	-	-	-	-	-	-	-	2,670	1,480	825
17.....	-	-	-	-	-	-	-	-	-	2,650	1,440	805
18.....	-	-	-	-	-	-	-	-	-	2,780	1,400	800
19.....	-	-	-	-	-	-	-	-	-	2,750	1,380	785
20.....	-	-	-	-	-	-	-	-	-	2,690	1,390	765
21.....	-	-	-	-	-	-	-	-	-	2,780	1,390	750
22.....	-	-	-	-	-	-	-	-	-	2,750	1,370	735
23.....	-	-	-	-	-	-	-	-	2,950	2,710	1,360	705
24.....	-	-	-	-	-	-	-	-	2,920	2,640	1,350	705
25.....	-	-	-	-	-	-	-	-	2,900	2,550	1,350	657
26.....	-	-	-	-	-	-	-	-	2,900	2,470	1,310	648
27.....	-	-	-	-	-	-	-	-	2,900	2,390	1,280	644
28.....	-	-	-	-	-	-	-	-	2,900	2,330	1,270	630
29.....	-	-	-	-	-	-	-	-	2,920	2,300	1,220	612
30.....	-	-	-	-	-	-	-	-	2,920	2,280	1,180	603
31.....	-	-	-	-	-	-	-	-	-	2,230	1,140	-
Mean	-	-	-	-	-	-	-	-	-	2,680	1,580	852
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	-	-	-	-	-	-	-	164,700	97,090	50,720

The Period.....Discharge: Daily - Maximum 23 June, 2,950

(92 days) - Minimum 30 September, 603

Mean 1,710

Runoff: Acre-feet 312,500

Discharges related to water elevations of Family Lake at Little Grand Rapids.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	598	320	239	191	221	200	194	284	608	1,070	1,250	1,200
2.....	590	320	236	191	218	200	200	287	630	1,070	1,250	1,190
3.....	576	314	230	191	218	200	200	290	662	1,090	1,240	1,180
4.....	562	311	227	191	218	200	200	302	675	1,100	1,250	1,180
5.....	549	308	224	188	218	200	206	314	690	1,110	1,250	1,180
6.....	532	305	221	188	218	200	212	317	710	1,110	1,270	1,150
7.....	524	296	218	188	218	200	206	320	735	1,140	1,270	1,150
8.....	516	302	218	188	221	200	203	324	755	1,200	1,270	1,150
9.....	508	296	215	188e	221	200	206	334	765	1,210	1,270	1,140
10.....	500	290	215	188	224	200	200	341	775	1,210	1,270	1,120
11.....	492	284	212	189	227	200	200	348	820	1,210	1,280	1,120
12.....	484	284	209	189	224	200	203	355	875	1,210	1,280	1,120
13.....	476	278	206	189	224	200	203	372	885	1,210	1,280	1,120
14.....	476	272	206	190	224	200	200	380	895	1,210	1,280	1,130
15.....	464	269	203	190	224	200	197	383	910	1,210	1,280	1,120
16.....	446	269	203	193	224	200	206	390	925	1,210	1,280	1,110
17.....	439	269	203	195	224	200	215	394	945	1,210	1,280	1,110
18.....	432	269	200	198	224	200	224	397	960	1,210	1,280	1,110
19.....	425	269	200	200	224	200	242	400	965	1,240	1,280	1,110
20.....	418	269	200	203	224	200	245	400	965	1,250	1,240	1,110
21.....	408	269	197	205	224	200	245	408	965	1,260	1,210	1,080
22.....	394	269	197	207	212	197	245	408	975	1,250	1,210	1,080
23.....	383	263	197	210	203	200	251	418	975	1,250	1,210	1,050
24.....	372	254	194	213	200	200	254	428	995	1,250	1,210	1,050
25.....	369	248	194	215	206	197	257	436	1,010	1,260	1,210	1,020
26.....	369	242	194	218	203	188	266	442	1,020	1,260	1,190	1,020
27.....	369	242	194	220e	203	173	275	540	1,030	1,260	1,190	1,000
28.....	369	242	194	224	203	176	275	576	1,040	1,260	1,190	1,000
29.....	352	242	191	227	-	179	278	585	1,060	1,260	1,200	985
30.....	338	239	191	227	-	185	281	590	1,060	1,260	1,200	925
31.....	324	-	191	224	-	185	-	603	-	1,260	1,200	-
Mean	453	277	207	201	218	196	226	399	876	1,200	1,240	1,100
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	27,880	16,470	12,730	12,330	12,080	12,060	13,470	24,530	52,130	74,000	76,500	65,470

The Year.....Discharge: Daily - Maximum 11 to 19 August, 1,280
 - Minimum 27 March, 173

Mean 552

Runoff: Acre-feet 399,600

Discharges related to water elevations of Family Lake at Little Grand Rapids.

e - Estimated 9 to 27 January.

PIGEON RIVER AT OUTLET OF ROUND LAKE - STATION No. 5RD₈

Location: Lat. 52° 02', long. 96° 24', Manitoba. Gauge: None; discharges related to gauge on Family Lake at Little Grand Rapids. Measurement of Discharge: From boat. Period of Record: June 1957 to date. Extremes Recorded: Daily - Maximum, 23 June 1957, 6,750 cfs, Minimum, 27 March 1958, 714 cfs. Remarks: Records fair. Discharge per square mile and runoff depth in inches omitted as this river is one of two outlets from Family Lake.

Daily Discharge in Cubic Feet per Second for Water Year 1956-57

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	-	-	-	-	-	-	-	-	-	6,690	5,600	3,540
2.....	-	-	-	-	-	-	-	-	-	6,670	5,520	3,490
3.....	-	-	-	-	-	-	-	-	-	6,650	5,420	3,470
4.....	-	-	-	-	-	-	-	-	-	6,600	5,460	3,420
5.....	-	-	-	-	-	-	-	-	-	6,650	5,340	3,350
6.....	-	-	-	-	-	-	-	-	-	6,650	5,280	3,250
7.....	-	-	-	-	-	-	-	-	-	6,650	5,280	3,200
8.....	-	-	-	-	-	-	-	-	-	6,580	5,130	3,160
9.....	-	-	-	-	-	-	-	-	-	6,560	5,010	3,130
10.....	-	-	-	-	-	-	-	-	-	6,520	4,900	3,080
11.....	-	-	-	-	-	-	-	-	-	6,520	4,820	2,980
12.....	-	-	-	-	-	-	-	-	-	6,480	4,750	2,880
13.....	-	-	-	-	-	-	-	-	-	6,420	4,630	2,770
14.....	-	-	-	-	-	-	-	-	-	6,360	4,540	2,680
15.....	-	-	-	-	-	-	-	-	-	6,360	4,480	2,640
16.....	-	-	-	-	-	-	-	-	-	6,360	4,420	2,580
17.....	-	-	-	-	-	-	-	-	-	6,340	4,330	2,520
18.....	-	-	-	-	-	-	-	-	-	6,520	4,240	2,500
19.....	-	-	-	-	-	-	-	-	-	6,480	4,200	2,460
20.....	-	-	-	-	-	-	-	-	-	6,400	4,220	2,400
21.....	-	-	-	-	-	-	-	-	-	6,520	4,220	2,360
22.....	-	-	-	-	-	-	-	-	-	6,480	4,160	2,310
23.....	-	-	-	-	-	-	-	-	6,750	6,420	4,140	2,220
24.....	-	-	-	-	-	-	-	-	6,710	6,320	4,120	2,180
25.....	-	-	-	-	-	-	-	-	6,690	6,200	4,120	2,090
26.....	-	-	-	-	-	-	-	-	6,690	6,080	4,030	2,060
27.....	-	-	-	-	-	-	-	-	6,690	5,960	3,950	2,050
28.....	-	-	-	-	-	-	-	-	6,690	5,880	3,910	2,010
29.....	-	-	-	-	-	-	-	-	6,710	5,840	3,810	1,960
30.....	-	-	-	-	-	-	-	-	6,710	5,800	3,700	1,940
31.....	-	-	-	-	-	-	-	-	-	5,720	3,590	-
Mean	-	-	-	-	-	-	-	-	-	6,380	4,560	2,690
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	-	-	-	-	-	-	-	392,100	280,300	160,000

The Period.....Discharge: Daily - Maximum 23 June, 6,750
 (92 days) - Minimum 30 September, 1,940
 Mean 4,560
 Runoff: Acre-feet 832,400

Discharges related to Family Lake gauge at Little Grand Rapids.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	1,930	1,140	897	766	785	750	742	898	1,500	2,790	3,330	3,160
2.....	1,900	1,140	888	766	780	750	750	904	1,550	2,790	3,330	3,140
3.....	1,870	1,130	870	766	780	750	750	910	1,620	2,830	3,300	3,120
4.....	1,830	1,110	862	766	780	750	750	934	1,650	2,870	3,330	3,120
5.....	1,790	1,100	854	758	780	750	760	958	1,680	2,900	3,330	3,100
6.....	1,750	1,090	846	758	780	750	770	964	1,730	2,900	3,390	3,040
7.....	1,730	1,080	838	758	780	750	760	970	1,780	3,000	3,390	3,040
8.....	1,700	1,090	830	758	785	750	755	976	1,830	3,160	3,390	3,020
9.....	1,680	1,080	830	758	785	750	760	994	1,860	3,200	3,390	3,000
10.....	1,660	1,060	830	758	790	750	750	1,010	1,880	3,200	3,390	2,940
11.....	1,640	1,040	822	758e	795	750	750	1,020	1,990	3,200	3,410	2,940
12.....	1,620	1,030	814	758	790	750	755	1,030	2,150	3,200	3,410	2,940
13.....	1,590	1,020	806	759	790	750	755	1,060	2,180	3,200	3,410	2,940
14.....	1,590	1,000	806	759	790	750	750	1,070	2,210	3,200	3,410	2,960
15.....	1,560	987	798	759	790	750	746	1,080	2,260	3,200	3,410	2,920
16.....	1,510	987	798	760	790	750	760	1,090	2,300	3,200	3,410	2,900
17.....	1,480	987	798	761	790	750	775	1,100	2,360	3,200	3,410	2,900
18.....	1,460	987	790	763	790	750	790	1,100	2,410	3,200	3,410	2,900
19.....	1,440	987	790	764	790	750	820	1,110	2,430	3,300	3,410	2,900
20.....	1,430	987	790	768	790	750	825	1,110	2,430	3,330	3,300	2,900
21.....	1,390	987	782	768	790	750	825	1,120	2,430	3,350	3,200	2,810
22.....	1,350	987	782	769	770	746	825	1,120	2,460	3,330	3,200	2,810
23.....	1,320	969	782	770	755	750	835	1,150	2,460	3,330	3,200	2,720
24.....	1,290	951	774	774	750	750	840	1,170	2,530	3,330	3,200	2,720
25.....	1,280	933	774	778	760	746	845	1,180	2,580	3,350	3,200	2,700e
26.....	1,280	915	774	782	755	734	862	1,200	2,610	3,350	3,140	2,700e
27.....	1,280	906	774	786e	755	714	880	1,380	2,650	3,350	3,140	2,700e
28.....	1,280	906	774	790	755	718	880	1,440	2,680	3,350	3,140	2,680e
29.....	1,230	897	766	795	-	722	886	1,460	2,740	3,350	3,160	2,680e
30.....	1,190	897	766	795	-	730	892	1,470	2,760	3,350	3,160	2,670e
31.....	1,150	-	766	790	-	730	-	1,510	-	3,350	3,160	-
Mean	1,520	1,010	809	768	779	745	795	1,110	2,190	3,180	3,310	2,900
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	93,620	60,260	49,730	47,240	43,280	45,800	47,290	68,410	130,300	195,700	203,200	172,700

The Year..... Discharge: Daily - Maximum 11 August, 3,410

- Minimum 27 March, 714

Mean 1,600

Runoff: Acre-feet 1,158,000

Discharges related to Family Lake gauge at Little Grand Rapids.

e - Estimated 11 to 27 January.

WINNIPEG RIVER TRIBUTARY BASIN

WINNIPEG RIVER AT MINAKI - STATION No. 5PE₉

Location: Lat. 49° 59' 15", long. 94° 39' 45", Ontario, on Gun Lake, one-half mile above Canadian National Railways bridge. Drainage Area: 27,730 square miles. Gauge: Staff; elevations referred to Geodetic Survey of Canada datum, adjustment previous to 1923. Period of Record: Daily discharges September 1913 to September 1939; elevations only October 1939 to date. Extremes Recorded: Daily - Maximum, 3 and 4 August 1950, 1,042.56 feet, Minimum, September and October 1931 and April 1932, 1,029.80 feet.

Daily Elevations in Feet for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	34.30	34.91	35.05	35.38	35.30	35.40	35.36	35.22	35.95	35.75	35.35	35.80
2.....	34.22	34.97	35.07	35.36	35.20	35.30	35.38	35.28	35.85	35.73	35.47	35.70
3.....	34.35	34.95	35.07	35.36	35.15	35.20	35.38	35.38	35.72	35.73	35.57	35.72
4.....	34.38	34.93	35.07	35.36	35.15	35.12	35.35	35.36	35.68	35.80	35.60	35.90
5.....	34.40	34.95	35.10	35.35	35.13	35.18	35.35	35.25	35.65	36.10	35.51	35.98
6.....	34.45	35.00	35.15	35.35	35.10	35.25	35.35	35.14	35.65	36.15	35.35	36.20
7.....	34.48	35.03	35.15	35.35	35.05	35.30	35.36	35.22	35.70	36.11	35.23	36.32
8.....	34.48	35.05	35.21	35.35	35.05	35.35	35.40	35.30	35.68	35.93	35.21	36.40
9.....	34.46	35.01	35.23	35.36	35.00	35.35	35.40	35.38	35.62	35.97	35.15	36.25
10.....	34.50	34.97	35.30	35.36	35.03	35.32	35.45	35.42	35.48	36.07	35.13	36.32
11.....	34.50	34.95	35.35	35.36	35.05	35.35	35.55	35.30	35.36	36.17	35.10	36.38
12.....	34.54	34.91	35.35	35.36	35.10	35.36	35.65	35.30	35.36	36.13	34.95	36.50
13.....	34.46	34.89	35.40	35.35	35.15	35.40	35.70	35.38	35.44	36.17	34.90	36.85
14.....	34.36	34.93	35.40	35.35	35.25	35.45	35.68	35.45	35.48	36.05	34.87	36.88
15.....	34.32	34.99	35.40	35.40	35.43	35.45	35.66	35.55	35.48	35.93	34.95	36.94
16.....	34.40	34.99	35.40	35.40	35.50	35.44	35.64	35.62	35.52	35.93	35.05	36.76
17.....	34.42	35.00	35.40	35.40	35.50	35.40	35.62	35.75	35.48	35.90	35.17	37.20
18.....	34.45	34.99	35.41	35.40	35.50	35.40	35.65	35.82	35.52	36.03	35.33	37.30
19.....	34.50	34.99	35.43	35.40	35.50	35.42	35.65	35.85	35.64	36.03	35.30	37.55
20.....	34.52	34.99	35.43	35.40	35.50	35.42	35.68	35.75	35.76	36.13	35.27	37.55
21.....	34.55	34.99	35.45	35.40	35.53	35.44	35.55	35.74	35.78	36.05	35.31	37.50
22.....	34.58	35.00	35.45	35.40	35.55	35.44	35.46	35.85	35.82	35.93	35.33	37.20
23.....	34.62	35.03	35.45	35.38	35.50	35.36	35.44	35.94	35.82	35.85	35.37	37.00
24.....	34.66	35.01	35.43	35.36	35.50	35.32	35.44	35.92	35.74	35.80	35.47	37.05
25.....	34.66	35.01	35.43	35.36	35.53	35.33	35.42	35.90	35.78	35.65	35.65	37.30
26.....	34.68	35.01	35.41	35.34	35.55	35.34	35.40	35.78	35.85	35.71	35.61	37.10
27.....	37.72	35.07	35.40	35.30	35.50	35.40	35.38	35.72	35.85	35.71	35.59	36.90
28.....	34.76	35.07	35.43	35.30	35.45	35.43	35.30	35.74	35.85	35.60	35.53	36.85
29.....	34.78	35.05	35.43	35.30	-	35.40	35.25	35.82	35.85	35.47	35.47	36.78
30.....	37.88	35.05	35.43	35.30	-	35.40	35.25	35.88	35.85	35.43	35.53	36.45
31.....	34.94	-	35.45	35.32	-	35.38	-	35.92	-	35.40	35.70	-

Add 1,000.00 to obtain elevation in feet, Geodetic Survey of Canada datum, adjustment previous to 1923.

Location: Lat. 50° 22' 00", long. 95° 20' 20", in sec. 21, tp. 16, rge. 16, E. 1st Mer., Manitoba, five miles above Lamprey Falls (corrected). Drainage Area: 48,800 square miles (an additional area of approximately 4,760 square miles contributes to the English River basin via Lake St. Joseph Diversion). Gauge: Recording; referred to Geodetic Survey of Canada datum, 1928 adjustment. Measurement of Discharge: From boat. Period of Record: Open water May 1956 to November 1957 and continuous May 1958 to date. Extremes Recorded: Daily - Maximum, 16 to 19 June 1956, 56,800 cfs (elevation 985.37 ft.), Minimum, 16 September 1957, 19,500 cfs (elevation 980.98 ft.); Instantaneous Maximum 4:30 p.m., 17 June 1956, 57,300 cfs (elevation 985.41 ft.). Remarks: Data for open water May 1928 to October 1955 were obtained above Boundary Falls, Station No. 5PF₅₁.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	-	-	-	-	-	-	-	24,500e	19,600	16,900	20,000	15,200
2.....	-	-	-	-	-	-	-	24,000e	19,500	17,700	20,000	15,300
3.....	-	-	-	-	-	-	-	23,500e	19,000	17,800	19,600	15,600
4.....	-	-	-	-	-	-	-	23,000e	18,700	18,300	18,900	16,000
5.....	-	-	-	-	-	-	-	22,700	18,700	19,800	18,300	16,400
6.....	-	-	-	-	-	-	-	22,300	18,700	22,400	18,300	15,800e
7.....	-	-	-	-	-	-	-	21,600	18,700	24,300	18,500	13,100
8.....	-	-	-	-	-	-	-	21,500	18,200	25,300	18,800	14,000
9.....	-	-	-	-	-	-	-	21,900	18,100	25,800	18,800	13,900
10.....	-	-	-	-	-	-	-	22,200	17,700	25,500	18,800	14,500
11.....	-	-	-	-	-	-	-	22,300	17,700	24,600	18,200	15,000
12.....	-	-	-	-	-	-	-	22,500	17,800	23,700	17,300	14,800
13.....	-	-	-	-	-	-	-	23,400	17,700	23,300	17,200	14,400
14.....	-	-	-	-	-	-	-	23,800	17,700	23,300	17,100	14,100
15.....	-	-	-	-	-	-	-	23,000	17,700	23,000	17,000	14,100
16.....	-	-	-	-	-	-	-	22,600	17,700	23,100	16,900	14,400
17.....	-	-	-	-	-	-	-	21,800	17,500	23,200	16,700	14,400
18.....	-	-	-	-	-	-	-	21,000	17,700	23,400	16,600	14,300
19.....	-	-	-	-	-	-	-	20,600	17,700	23,400	16,400	14,600
20.....	-	-	-	-	-	-	-	20,500	17,800	23,000	16,300	15,500
21.....	-	-	-	-	-	-	-	20,300	17,800	22,700	16,200	15,700
22.....	-	-	-	-	-	-	-	20,100	17,700	22,200	16,000e	15,600
23.....	-	-	-	-	-	-	-	20,200	17,600	22,100	15,900	15,900
24.....	-	-	-	-	-	-	-	20,400	17,500	22,400	15,900	16,100
25.....	-	-	-	-	-	-	-	20,700	17,200	22,500	15,700	17,900
26.....	-	-	-	-	-	-	-	20,800	16,400	22,400	15,700	19,900
27.....	-	-	-	-	-	-	-	20,800	16,200	22,200	15,700	21,600
28.....	-	-	-	-	-	-	-	20,900	16,400	21,600	15,800	22,100
29.....	-	-	-	-	-	-	-	20,600	16,700	21,100	15,700	21,900
30.....	-	-	-	-	-	-	-	20,100	16,600	20,600	15,600	22,500
31.....	-	-	-	-	-	-	-	19,900	-	20,000	15,300	-
Mean	-	-	-	-	-	-	-	21,700	17,800	22,200	17,200	16,200
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet in 1000	-	-	-	-	-	-	-	1,336	1,059	1,364	1,058	961.2

The Period..... Discharge: Daily - Maximum 9 July 25,800 (elevation 981.35)
 (153 days) - Minimum 7 September 13,100 (elevation 979.81)
 Mean 19,000
 Runoff: Acre-feet 5,778,000

e - Estimated 22 August to 6 September and as indicated.

Location: Lat. 50° 13' 30", long. 95° 34' 15", in NW. 1/4 sec. 36, tp. 14, rge. 14, E. 1st Mer., Manitoba. Drainage Area: 48,880 square miles (an additional area of approximately 4,760 square miles contributes to the English River basin via Lake St. Joseph Diversion). Gauge: Recording, in forebay and tailrace. Period of Record: October 1947 to date. Average Discharge: (46 years) - 27,000 cfs. Extremes Recorded: Daily - Maximum, 30 June 1954, 98,800 cfs, Minimum, 6 September 1958, 9,200 cfs. Remarks: Records supplied by the City of Winnipeg Hydro-Electric System. Records January 1907 to June 1931 above Slave Falls, Station No. 5PF₇; and June 1931 to September 1947 at City of Winnipeg Power Plant, Pointe du Bois, Station No. 5PF₅₉.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	22,500	22,300	24,300	26,800	27,300	27,700	23,500	21,400	19,300	16,000	19,300	14,000
2.....	22,900	22,400	24,200	26,400	27,300	28,100	23,600	21,500	18,700	16,200	19,900	14,500
3.....	22,700	22,800	24,100	27,100	27,200	27,700	23,400	20,800	18,800	16,700	19,300	13,900
4.....	21,900	22,700	24,000	27,600	27,300	27,500	23,200	20,600	18,400	18,200	18,200	13,700
5.....	21,700	23,100	24,500	27,300	26,800	27,400	23,400	20,700	18,000	19,400	17,400	12,900
6.....	21,600	23,400	24,200	27,500	26,400	27,000	23,200	20,400	17,700	21,900	17,200	9,200
7.....	20,900	23,600	24,100	27,200	26,600	26,200	22,400	20,400	17,900	23,300	18,000	9,300
8.....	20,600	22,900	24,000	27,000	26,700	26,000	22,500	20,300	17,500	23,700	18,200	12,800
9.....	20,000	22,900	24,000	27,400	26,500	26,100	22,400	20,400	16,700	24,400	18,200	12,900
10.....	20,600	23,500	24,100	27,800	26,200	26,000	22,300	20,200	17,200	24,400	17,900	13,100
11.....	19,800	23,900	24,300	26,800	26,100	25,600	22,600	20,300	16,700	23,500	17,200	13,200
12.....	19,700	23,400	24,800	27,000	26,400	25,500	23,000	22,300	17,200	23,300	16,800	13,000
13.....	20,000	24,400	25,100	26,900	26,300	25,600	22,400	25,900	16,900	23,200	16,300	12,000
14.....	19,700	23,500	25,400	26,500	26,000	25,000	21,700	25,000	17,200	23,200	16,400	12,100
15.....	20,100	23,900	25,800	26,500	25,200	25,000	21,400	23,700	17,000	22,000	16,200	12,700
16.....	20,200	24,100	25,800	26,600	24,000	24,900	21,900	22,300	16,700	22,700	16,400	12,700
17.....	20,000	24,000	26,100	26,600	24,900	25,000	21,600	21,700	16,800	22,600	16,100	12,700
18.....	19,900	23,800	26,500	26,400	24,700	25,600	21,300	20,400	16,800	22,500	15,600	12,900
19.....	20,000	23,900	26,400	26,400	24,600	25,200	21,700	20,000	16,900	22,400	15,600	13,000
20.....	20,100	23,700	26,500	26,400	25,700	24,400	21,700	20,100	16,900	22,300	15,400	12,900
21.....	20,300	23,700	26,600	26,800	26,100	25,000	22,300	19,600	17,000	22,400	15,100	12,800
22.....	20,600	23,900	26,800	26,700	26,500	25,200	23,000	19,300	16,500	21,500	15,300	13,000
23.....	20,600	24,400	26,700	26,400	26,600	24,500	22,300	19,400	17,000	21,400	15,800	14,000
24.....	20,500	23,900	26,200	26,600	27,000	24,400	22,000	19,600	16,200	21,300	15,400	15,300
25.....	20,200	24,100	27,400	26,700	27,600	23,900	22,000	19,300	16,200	21,400	14,700	17,200
26.....	20,900	23,900	26,900	27,000	27,300	24,000	22,300	20,400	15,400	21,800	15,100	20,000
27.....	21,000	24,500	26,700	27,000	28,600	24,200	22,300	20,600	14,300	21,300	14,800	20,200
28.....	21,600	24,000	26,700	27,200	28,200	23,600	22,200	19,700	15,300	21,000	14,300	21,200
29.....	21,500	23,800	26,100	27,200	-	24,000	21,900	20,000	15,600	20,200	14,700	21,400
30.....	22,000	23,900	26,700	27,100	-	23,700	21,900	19,800	15,500	20,100	14,500	21,100
31.....	22,600	-	26,900	27,200	-	23,500	-	19,400	-	19,300	13,600	-
Mean	20,900	23,600	25,500	26,900	26,400	25,400	22,400	20,800	16,900	21,400	16,400	14,300
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	-	-	-	-	-	-	-	-	-	-

The Year.....Discharge: Daily - Maximum 27 February, 28,600

- Minimum 6 September, 9,200

Mean 21,700;

Runoff: Acre-feet 15,742,000;

Location: Lat. 50° 15' 35", long. 96° 03' 20", in NW. 1/4 sec. 17, tp. 15, rge. 11, E. 1st Mer., Manitoba. Gauge: Staff; elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. Period of Record: January 1921 to date. Extremes Recorded: Daily - Maximum, 7 to 10 and 16 July 1954 (Prior to development of McArthur Falls) 830.01 feet, 26 December 1955 (Since development of McArthur Falls) 836.50 feet. Minimum, 23 September 1940 (Prior to development of McArthur Falls) 814.98 feet, 16 and 18 September 1958 (Since development of McArthur Falls) 834.00 feet. Remarks: From October 1954, levels controlled by McArthur Falls Power Plant operating to elevation 836.00 feet.

Daily Elevations in Feet for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	36.35	35.50	36.00	35.55	35.70	35.40	35.60	34.77	34.65	34.75	34.42	35.40
2.....	36.25	35.30	36.10	35.75	35.85	35.45	35.60	34.60	35.05	34.75	34.50	35.30
3.....	35.95	35.60	36.00	35.70	36.10	35.75	36.05	34.65	34.90	34.70	34.25	35.05
4.....	35.75	35.95	35.90	35.65	36.10	35.65	35.60	35.15	34.85	34.78	34.22	35.00
5.....	35.55	35.75	35.85	35.85	36.05	35.45	35.55	35.35	34.70	34.92	34.85	35.00
6.....	35.95	35.70	35.70	36.15	35.90	35.45	34.80	35.27	34.50	35.25	34.65	34.90
7.....	36.12	35.62	35.75	36.00	35.90	35.35	35.45	35.15	34.55	35.92	34.55	35.00
8.....	36.00	35.55	36.10	36.00	35.85	35.40	35.25	34.85	34.75	35.70	34.45	34.55
9.....	35.90	35.20	36.10	35.85	36.00	35.40	35.15	34.90	35.00	35.90	34.50	34.35
10.....	35.55	35.20	35.90	35.70	36.17	35.67	35.00	34.85	35.05	35.72	34.55	34.10
11.....	35.35	35.95	35.80	35.75	36.00	35.57	34.95	35.25	34.80	35.80	35.05	34.15
12.....	35.35	36.12	35.80	36.15	35.90	35.37	34.95	35.15	34.80	35.80	34.80	34.10
13.....	35.40	35.85	35.70	36.05	35.70	35.15	34.90	35.05	34.70	35.90	34.65	34.15
14.....	36.00	35.75	35.80	35.75	35.70	35.00	35.35	35.15	34.65	35.85	34.50	34.10
15.....	36.05	35.50	36.10	35.65	35.75	35.00	35.20	35.15	34.90	35.80	34.35	34.20
16.....	35.90	35.45	36.20	35.60	35.95	35.27	35.10	34.95	35.05	35.65	34.35	34.00
17.....	35.90	35.70	36.10	35.60	36.10	35.30	35.00	34.95	35.05	35.45	34.70	34.05
18.....	35.80	36.15	35.90	35.65	36.07	35.45	34.90	35.15	35.05	35.60	35.02	34.00
19.....	35.75	36.05	35.70	36.00	35.87	35.27	34.45	35.15	35.02	35.65	34.85	34.20
20.....	35.75	35.75	35.70	36.10	35.75	35.15	34.95	35.05	35.00	35.32	34.60	34.20
21.....	36.05	35.55	35.80	36.05	35.75	35.13	35.25	34.55	35.00	35.35	34.45	34.25
22.....	36.05	35.40	35.80	36.00	35.85	35.00	35.17	34.45	35.15	35.05	34.45	34.35
23.....	35.80	35.40	35.90	35.85	36.15	35.45	35.00	34.40	35.15	34.90	34.52	34.30
24.....	35.60	35.70	35.80	35.70	36.30	35.60	34.85	34.55	35.10	34.95	35.00	34.30
25.....	35.52	35.80	35.70	35.75	36.35	35.65	34.70	34.85	34.85	35.30	35.32	34.35
26.....	35.50	35.75	35.80	36.05	35.95	35.55	34.65	35.05	34.75	35.35	35.10	34.55
27.....	35.60	35.80	35.80	36.15	35.57	35.15	34.90	34.90	34.45	35.40	35.10	34.70
28.....	36.25	35.75	35.60	36.15	35.25	35.05	35.25	34.65	34.45	35.05	34.95	35.15
29.....	36.20	35.75	35.80	35.95	-	35.05	34.95	34.30	34.50	35.00	34.75	35.50
30.....	36.00	35.60	35.90	35.65	-	35.25	34.85	34.30	34.55	34.78	34.90	35.55
31.....	35.70	-	35.80	35.65	-	35.50	-	34.40	-	34.60	35.00	-

Add 800.00 to obtain elevation in feet, Geodetic Survey of Canada datum, 1928 adjustment.

BASSWOOD RIVER NEAR WINTON - STATION No. 5PA_{0,1}

(International Gauging Station)

Location: Lat. 48° 04' 55", long. 91° 39' 10", in sec. 30, tp. 65 N., rge. 10W., Minnesota, on Jackfish Bay of Basswood Lake. Drainage Area: Approximately 1,740 square miles. Gauge: Recording; elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. Measurement of Discharge: From boat. Period of Record: 1931 to date. Average Discharge: (27 years) - 1,363 cfs. Extremes Recorded: Daily - Maximum, 24 May 1950, 15,200 cfs (elevation 1,306.64 ft.), Minimum, 4 December 1948, 77 cfs; Instantaneous Maximum 12:30 a.m., 24 May 1950, 15,600 cfs (elevation 1,306.74 ft.). Remarks: Records good. Flow affected by storage on Kawishiwi River. This station is maintained by the United States under agreement with Canada.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	510	359	517	598	538	418	475	425	718	820	545	489
2.....	510	371	524	598	538	418	469	425	718	800	538	496
3.....	496	371	531	598	538	412	462	412	727	800	524	510
4.....	482	371	538	598	531	412	462	406	754	781	524	510
5.....	469	365	552	590	531	406	462	400	781	754	510	524
6.....	456	359	552	605	524	400	462	406	790	754	489	531
7.....	462	371	568	605	517	406	456	406	800	736	475	560
8.....	456	394	575	605	510	412	456	406	810	718	475	590
9.....	444	406	582	605	503	412	462	412	820	692	462	636
10.....	431	412	582	598	496	418	469	418	870	668	469	660
11.....	425	412	582	605	489	425	469	425	880	652	462	718
12.....	412	418	582	605	489	431	475	437	890	636	456	763
13.....	406	425	575	598	489	450	475	444	890	636	450	810
14.....	400	431	568	598	482	462	475	456	890	605	437	870
15.....	400	444	568	598	469	482	475	469	880	575	425	901
16.....	400	437	568	590	462	496	475	489	870	552	418	956
17.....	412	437	560	582	456	524	469	510	870	538	412	1,010
18.....	412	437	560	575	450	545	469	531	850	496	412	1,040
19.....	412	444	575	575	444	552	469	531	850	489	406	1,080
20.....	412	456	575	568	437	552	469	538	860	475	394	1,100
21.....	412	450	575	568	431	552	469	552	860	462	388	1,100
22.....	412	450	575	560	431	552	482	568	860	456	382	1,110
23.....	406	450	568	552	431	552	482	582	870	450	394	1,130
24.....	394	456	575	552	431	552	475	605	870	456	394	1,150
25.....	388	462	575	545	431	552	462	620	860	456	394	1,160
26.....	377	469	575	545	431	545	456	644	860	469	388	1,160
27.....	371	475	590	545	431	531	450	636	860	531	394	1,170
28.....	365	489	598	545	425	517	444	652	840	545	394	1,190
29.....	365	496	598	552	-	503	444	668	820	531	406	1,190
30.....	365	510	598	552	-	489	431	684	810	538	425	1,190
31.....	365	-	598	545	-	462	-	709	-	545	482	-
Mean	420	428	570	579	476	479	465	512	834	601	443	877
Per sq. mi.	0.241	0.246	0.328	0.333	0.274	0.275	0.267	0.294	0.479	0.345	0.255	0.504
Acre-feet	25,840	25,440	35,030	35,030	26,450	29,470	27,670	31,470	49,640	36,920	27,220	52,170

The Year..... Discharge: Daily - Maximum 28 September, 1,190 (elevation 1,300.47)
 - Minimum 1 November, 359 (elevation 1,299.51)
 Instantaneous Maximum 7:30 p.m., 30 September, 1,220 (elevation 1,300.49)
 Mean 55%; Per Square Mile 0.320
 Runoff: Acre-feet 402,900; Depth in inches on drainage area 4.34

(International Gauging Station)

Location: Lat. 48° 21' 20", long. 92° 12' 50", Ontario, at Campbell's Camps, two and one-half miles west of outlet of Lac la Croix. Drainage Area: 5,165 square miles. Gauge: Staff; elevations referred to United States and Canada Boundary Survey datum. Measurement of Discharge: From boat. Period of Record: August 1921 to date. Average Discharge: (36 years) - 3,600 cfs. Extremes Recorded: Daily - Maximum, 31 May, 1 and 2 June 1950, 28,200 cfs, Minimum, February, March and April, 1924, 535 cfs. Remarks: Records good. This station is maintained by Canada under agreement with the United States.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	2,210	1,660	2,050	2,060	1,960	1,730	1,380	1,790	1,860	2,140	1,870	1,330
2.....	2,190	1,630	2,060	2,060	1,960	1,730	1,380	1,840	1,860	2,180	1,830	1,310
3.....	2,180	1,610	2,070	2,060	1,950	1,720	1,380	1,880	1,840	2,190	1,800	1,280
4.....	2,170	1,590	2,080	2,060	1,950	1,720	1,380	1,900	1,840	2,210	1,780	1,280
5.....	2,140	1,570	2,100	2,060	1,940	1,710	1,380	1,920	1,880	2,210	1,740	1,270
6.....	2,100	1,540	2,110	2,060	1,930	1,700	1,380	1,940	1,890	2,220	1,700	1,280
7.....	2,100	1,540	2,120	2,060	1,920	1,690	1,380	1,980	1,880	2,230	1,680	1,280
8.....	2,100	1,540	2,120	2,060	1,900	1,670	1,400	1,990	1,890	2,240	1,670	1,280
9.....	2,080	1,540	2,120	2,060	1,890	1,640	1,460	1,930	1,890	2,240	1,630	1,260
10.....	2,070	1,530	2,120	2,060	1,880	1,630	1,480	1,890	1,920	2,230	1,630	1,250
11.....	2,050	1,520	2,120	2,060	1,870	1,620	1,500	1,890	1,980	2,220	1,610	1,250
12.....	2,020	1,510	2,120	2,060	1,870	1,600	1,520	1,940	2,010	2,210	1,570	1,230
13.....	1,990	1,500	2,110	2,050	1,860	1,590	1,540	1,940	2,010	2,210	1,560	1,220
14.....	1,990	1,490	2,110	2,050	1,860	1,580	1,540	1,900	2,040	2,190	1,540	1,240
15.....	1,990	1,480	2,100	2,040	1,840	1,570	1,570	1,890	2,040	2,160	1,520	1,240
16.....	1,990	1,470	2,100	2,040	1,830	1,560	1,580	1,920	2,040	2,120	1,500	1,180
17.....	2,000	1,460	2,100	2,020	1,830	1,540	1,590	1,920	2,040	2,080	1,480	1,200
18.....	2,010	1,450	2,100	2,020	1,820	1,530	1,600	1,920	2,040	2,000	1,460	1,230
19.....	1,990	1,460	2,080	2,010	1,810	1,520	1,600	1,890	2,050	2,000	1,420	1,250
20.....	1,980	1,540	2,080	2,010	1,810	1,510	1,540	1,870	2,040	1,960	1,400	1,250
21.....	1,940	1,630	2,070	2,010	1,800	1,500	1,560	1,880	2,020	1,930	1,350	1,290
22.....	1,930	1,700	2,070	2,000	1,790	1,490	1,600	1,860	2,040	1,880	1,280	1,280
23.....	1,900	1,790	2,070	2,000	1,780	1,480	1,600	1,860	2,020	1,860	1,260	1,310
24.....	1,880	1,880	2,070	2,000	1,760	1,450	1,610	1,860	2,080	1,840	1,280	1,320
25.....	1,860	1,980	2,070	2,000	1,750	1,450	1,610	1,860	2,140	1,860	1,290	1,410
26.....	1,810	2,000	2,070	1,990	1,740	1,440	1,610	1,860	2,140	1,840	1,300	1,460
27.....	1,780	2,010	2,060	1,990	1,740	1,420	1,610	1,860	2,160	1,830	1,280	1,460
28.....	1,760	2,020	2,060	1,990	1,740	1,400	1,620	1,860	2,170	1,940	1,270	1,480
29.....	1,750	2,040	2,060	1,990	-	1,400	1,680	1,870	2,160	1,940	1,270	1,510
30.....	1,710	2,050	2,060	1,980	-	1,390	1,760	1,870	2,160	1,930	1,290	1,510
31.....	1,680	-	2,060	1,980	-	1,380	-	1,860	-	1,920	1,330	-
Mean	1,980	1,660	2,090	2,030	1,850	1,560	1,530	1,890	2,000	2,060	1,500	1,300
Per sq. mi.	0.38	0.32	0.40	0.39	0.36	0.30	0.30	0.37	0.39	0.40	0.29	0.25
Acre-feet	121,700	98,640	128,300	124,700	102,700	95,920	90,920	116,300	119,300	127,000	92,410	77,630

The Year.....Discharge: Daily - Maximum 8 and 9 July, 2,240 (elevation 1,183.35)
- Minimum 16 September, 1,180 (elevation 1,182.40)

Mean 1,790; Per Square Mile 0.35

Runoff: Acre-feet 1,296,000; Depth in inches on drainage area 4.73

Daily Elevations in Feet for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	83.32	82.85	83.19	83.20	83.12	82.92	82.60	82.97	83.03	83.27	83.04	82.55
2.....	83.31	82.83	83.20	83.20	83.12	82.92	82.60	83.02	83.03	83.30	83.01	82.53
3.....	83.30	82.81	83.21	83.20	83.11	82.91	82.60	83.05	83.02	83.31	82.98	82.50
4.....	83.29	82.79	83.22	83.20	83.11	82.91	82.60	83.07	83.02	83.32	82.96	82.50
5.....	83.27	82.77	83.23	83.20	83.10	82.90	82.60	83.08	83.05	83.32	82.93	82.49
6.....	83.23	82.75	83.24	83.20	83.09	82.89	82.60	83.10	83.06	83.33	82.89	82.50
7.....	83.23	82.75	83.25	83.20	83.08	82.88	82.60	83.13	83.05	83.34	82.87	82.50
8.....	83.23	82.75	83.25	83.20	83.07	82.86	82.62	83.14	83.06	83.35	82.86	82.50
9.....	83.22	82.75	83.25	83.20	83.06	82.84	82.67	83.09	83.06	83.35	82.83	82.48
10.....	83.21	82.74	83.25	83.20	83.05	82.83	82.69	83.06	83.08	83.34	82.83	82.47
11.....	83.19	82.73	83.25	83.20	83.04	82.82	82.71	83.06	83.13	83.33	82.81	82.47
12.....	83.17	82.72	83.25	83.20	83.04	82.80	82.73	83.10	83.16	83.32	82.77	82.45
13.....	83.14	82.71	83.24	83.19	83.03	82.79	82.75	83.10	83.16	83.32	82.76	82.44
14.....	83.14	82.70	83.24	83.19	83.03	82.78	82.75	83.07	83.18	83.31	82.75	82.46
15.....	83.14	82.69	83.23	83.18	83.02	82.77	82.77	83.06	83.18	83.28	82.73	82.46
16.....	83.14	82.68	83.23	83.18	83.01	82.76	82.78	83.08	83.18	83.25	82.71	82.40
17.....	83.15	82.67	83.23	83.17	83.01	82.75	82.79	83.08	83.18	83.22	82.69	82.42
18.....	83.16	82.66	83.23	83.17	83.00	82.74	82.80	83.08	83.18	83.15	82.67	82.45
19.....	83.14	82.67	83.22	83.16	82.99	82.73	82.80	83.06	83.19	83.15	82.64	82.47
20.....	83.13	82.75	83.22	83.16	82.99	82.72	82.75	83.04	83.18	83.12	82.62	82.47
21.....	83.10	82.83	83.21	83.16	82.98	82.71	82.76	83.05	83.17	83.09	82.57	82.51
22.....	83.09	82.89	83.21	83.15	82.97	82.70	82.80	83.03	83.18	83.05	82.50	82.50
23.....	83.07	82.97	83.21	83.15	82.96	82.69	82.80	83.03	83.17	83.03	82.48	82.53
24.....	83.05	83.05	83.21	83.15	82.95	82.66	82.81	83.03	83.22	83.02	82.50	82.54
25.....	83.03	83.13	83.21	83.15	82.94	82.66	82.81	83.03	83.27	83.03	82.51	82.63
26.....	82.99	83.15	83.21	83.14	82.93	82.65	82.81	83.03	83.27	83.02	82.52	82.67
27.....	82.96	83.16	83.20	83.14	82.93	82.64	82.81	83.03	83.28	83.01	82.50	82.67
28.....	82.95	83.17	83.20	83.14	82.93	82.62	82.82	83.03	83.29	83.10	82.49	82.69
29.....	82.94	83.18	83.20	83.14	-	82.62	82.87	83.04	83.28	83.10	82.49	82.72
30.....	82.90	83.19	83.20	83.13	-	82.61	82.95	83.04	83.28	83.09	82.51	82.72
31.....	82.87	-	83.20	83.13	-	82.60	-	83.03	-	83.08	82.55	-

Add 1,100.00 to obtain elevation in feet, United States and Canada Boundary Survey datum.
Elevations refer to water level at Campbell's Camps on Lac la Croix.

(International Gauging Station)

Location: Lat. 48° 38' 04", long. 93° 54' 47", in sec. 36, tp. 160 N., rge. 26 W., Minnesota, four miles west of Indus.
 Drainage Area: Approximately 19,400 square miles. Gauge: Recording; elevations referred to Mean Sea Level, 1929 datum. Measurement of Discharge: From cableway. Period of Record: October 1932 to date. Average Discharge: (24 years) 12,870 cfs. Extremes Recorded: Daily - Maximum, 12 May 1950, 71,300 cfs (elevation 1,083.46 ft.). Minimum 18, 19 January and 1 February 1941, 2,200 cfs; Instantaneous Maximum 9 a.m., 12 May 1950, 71,600 cfs (elevation 1,083.52 ft.). Remarks: Records good except those for periods of ice effect, which are fair. Flow is partly regulated by power plant at Fort Frances and by storage on Rainy, Namakan and many other smaller lakes. This station is maintained by the United States under agreement with Canada.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	10,500	10,600	7,300	7,600	9,800	9,400	8,350	5,250	3,600	4,210	8,100	3,950'
2.....	12,100	11,100	6,400	8,800	10,200	10,900	8,950	4,960	3,860	4,400	7,360	3,480
3.....	12,500	10,100e	9,800	10,500	9,000	7,000	9,320	5,030	3,910	5,430	6,590	3,850
4.....	12,100	8,200e	8,800	10,400	10,000	8,800	9,570	5,270	3,250	6,700	6,700	4,140
5.....	11,300	9,500e	10,300	9,800	10,400	10,300	9,680	5,270	3,730	8,290	5,700	4,130
6.....	11,300	10,500e	10,000	8,000	10,500	9,700	9,570	4,980	4,950	9,980	4,980	4,290
7.....	7,620	11,000e	10,800	10,700	9,700	9,500	7,180	5,540	5,760	9,150	4,260	4,500
8.....	8,600	12,000e	10,200	10,800	9,200	8,800	8,100	5,490	6,300	9,250	4,230	4,040
9.....	10,100	13,000e	7,400	10,500	10,800	9,500	9,940	5,790	6,160	10,200	3,960	4,210
10.....	11,400	12,300	9,500	10,800	7,100	9,000b	10,000	5,240	5,740	9,870	3,920	4,560
11.....	12,300	8,620	11,200	10,800	9,000	8,820	9,750	4,940	6,340	9,130	3,860	4,250
12.....	12,200	10,200	11,200	10,700	9,400	9,940	9,380	3,970	7,120	10,100	3,730	4,450
13.....	11,900	12,700	11,200	8,000	10,200	7,740	3,710	7,700	10,100	3,940	4,320	
14.....	8,140	13,000	11,200	9,500	10,200	10,100	5,590	3,960	7,860	9,340	3,790	4,010
15.....	9,840	13,500	11,200	10,600	10,800	9,870	5,960	4,080	7,820	9,150	3,670	3,770
16.....	11,600	13,900	8,000	11,000	10,000	9,020	7,580	4,160	6,470	9,960	3,690	3,770
17.....	12,600	13,300	10,000	11,000	9,200	7,380	8,710	4,130	5,820	10,900	4,170	3,790
18.....	12,800	9,590	11,200	11,000	11,000	8,420	8,490	4,080	5,650	11,200	3,940	3,730
19.....	12,500	10,200	11,200	11,000	9,600	9,680	8,550	4,080	5,270	10,200	3,650	3,810
20.....	11,800	11,800	11,200	9,000	10,800	10,100	8,840	4,230	5,010	8,770	3,580	4,290
21.....	8,260	12,400	11,400	10,100	9,800	10,100	5,960	4,460	4,690	6,720	3,690	4,660
22.....	9,150	12,700	11,600	10,300	9,000	10,300	5,140	4,160	4,580	8,550	3,950	4,050
23.....	10,800	11,700	7,000	10,400	9,000	10,100	7,020	4,160	4,840	8,730	4,290	3,810
24.....	12,500	12,000	8,600	10,200	8,000	9,380	6,940	4,170	4,300	10,500	5,000	4,130
25.....	13,100	9,250	7,700	11,000	7,800	9,880	6,940	4,360	4,360	10,800	4,530	4,680
26.....	13,300	10,300b	7,000	10,800	8,600	9,590	6,960	3,120	4,650	10,100	4,030	4,740
27.....	12,400	11,300	10,600	8,000	9,200	10,300	5,400	3,400	4,740	8,160	4,200	4,520
28.....	8,230	12,000	11,200	10,300	9,800	10,500	4,620	4,250	4,580	6,320	4,310	4,980
29.....	10,300	9,700	11,000	10,300	-	10,600	4,950	4,430	4,560	5,670	4,260	4,140
30.....	12,100	8,000	7,500	10,300	-	10,100	5,060	4,390	4,260	6,570	4,470	3,800
31.....	12,400	-	8,000	10,200	-	8,770	-	3,170	-	8,440	4,680	-
Mean	11,150	11,150	9,668	10,080	9,575	9,518	7,675	4,459	5,263	8,609	4,556	4,168
Per sq. mi.	0.575	0.575	0.498	0.520	0.494	0.491	0.396	0.230	0.271	0.444	0.235	0.215
Acre-feet	685,800	663,400	594,400	619,600	531,800	585,200	456,700	274,200	313,200	529,400	280,100	248,000

The Year..... Discharge: Daily - Maximum 16 November, 13,900 (elevation 1,069.21)
 - Minimum 26 May, 3,120 (elevation 1,063.58)
 Instantaneous Maximum 3 p.m., 17 November, 14,300 (elevation 1,069.30)
 Mean 7,986; Per Square Mile 0.412
 Runoff: Acre-feet 5,782,000; Depth in inches on drainage area 5.57

b - Ice conditions 26 November to 10 March.

e - Estimated.

Location: Lat. 48° 46' 20", long. 92° 36' 30", Ontario. Gauge: Staff; elevations referred to Geodetic Survey of Canada datum, 1923 adjustment. Period of Record: August 1914 to date. Extremes Recorded: Daily - Maximum, 2 October, 1941, 1,141.22 feet, Minimum, 25 to 28 October 1940, 1,129.86 feet. Remarks: Previous to October 1957, this station was used to determine the flow of the Turtle River near Mine Centre, Ontario.

Daily Elevations in Feet for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	32.54	32.15	32.81	32.02	31.80	31.69	31.68	32.40	32.17	32.47	33.50	31.82
2.....	32.49	32.17	32.78	31.99	31.80	31.69	31.72	32.40	32.22	32.57	33.32	31.88
3.....	32.44	32.27	32.72	31.99	31.80	31.69	31.78	32.46	32.38	32.60	33.17	31.97
4.....	32.44	32.40	32.72	31.97	31.78	31.69	31.85	32.55	32.62	32.72	33.04	32.04
5.....	32.40	32.45	32.68	31.97	31.78	31.69	31.90	32.62	32.87	32.82	33.00	32.04
6.....	32.39	32.50	32.68	31.97	31.78	31.69	31.90	32.62	33.12	32.97	32.92	32.12
7.....	32.39	32.50	32.66	31.95	31.78	31.69	32.06	32.67	33.28	33.12	32.82	32.27
8.....	32.44	32.53	32.64	31.95	31.78	31.67	32.12	32.70	33.37	33.24	32.70	32.32
9.....	32.49	32.57	32.61	31.92	31.78	31.67	32.16	32.68	33.37	33.34	32.62	32.40
10.....	32.49	32.57	32.61	31.92	31.76	31.67	32.20	32.67	33.40	33.52	32.57	32.44
11.....	32.49	32.53	32.56	31.92	31.76	31.67	32.20	32.67	33.44	33.62	32.52	32.47
12.....	32.46	32.50	32.51	31.89	31.76	31.67	32.22	32.64	33.38	33.68	32.52	32.52
13.....	32.42	32.50	32.48	31.89	31.76	31.67	32.22	32.60	33.38	33.74	32.42	32.52
14.....	32.40	32.50	32.42	31.89	31.76	31.67	32.22	32.62	33.32	33.90	32.42	32.58
15.....	32.34	32.57	32.41	31.87	31.73	31.67	32.22	32.58	33.24	33.88	32.38	32.70
16.....	32.29	32.65	32.32	31.87	31.73	31.65	32.22	32.54	33.20	33.92	32.34	32.68
17.....	32.39	32.71	32.28	31.87	31.73	31.65	32.30	32.52	33.12	33.98	32.27	32.67
18.....	32.44	32.75	32.26	31.85	31.73	31.65	32.30	32.52	33.07	34.07	32.18	32.64
19.....	32.44	32.81	32.22	31.85	31.73	31.69	32.30	32.57	33.02	34.07	32.12	32.64
20.....	32.42	32.81	32.22	31.85	31.73	31.69	32.30	32.54	33.02	34.08	32.07	32.64
21.....	32.36	32.83	32.21	31.85	31.68	31.67	32.30	32.42	32.98	34.10	32.04	32.67
22.....	32.39	32.85	32.16	31.83	31.63	31.67	32.32	32.42	32.97	34.12	32.00	32.62
23.....	32.39	32.85	32.16	31.83	31.58	31.67	32.35	32.38	32.92	34.12	31.97	32.58
24.....	32.34	32.85	32.14	31.82	31.63	31.67	32.35	32.34	32.87	34.10	31.97	32.62
25.....	32.34	32.83	32.12	31.82	31.66	31.65	32.35	32.34	32.82	34.10	31.92	32.70
26.....	32.34	32.81	32.08	31.82	31.66	31.65	32.35	32.28	32.82	34.02	31.92	32.70
27.....	32.32	32.83	32.08	31.82	31.68	31.65	32.32	32.30	32.74	33.98	31.87	32.64
28.....	32.26	32.83	32.06	31.82	31.68	31.65	32.35	32.27	32.62	33.98	31.87	32.52
29.....	32.20	32.85	32.06	31.82	-	31.65	32.35	32.27	32.58	33.94	31.84	32.38
30.....	32.19	32.80	32.06	31.82	-	31.65	32.36	32.20	32.47	33.82	31.82	32.32
31.....	32.19	-	32.04	31.82	-	31.65	-	32.20	-	33.62	31.82	-

Add 1,100.00 to obtain elevation in feet, Geodetic Survey of Canada datum, 1923 adjustment.

Location: Lat. 48° 51' 00", long. 92° 43' 30", Ontario, above Manitou Rapids, seven and one-half miles northwest of Mine Centre. Drainage Area: 1,880 square miles. Gauge: Recording. Measurement of Discharge: From boat. Period of Record: August 1914 to date; discharge records previous to October 1957 were referred to gauge on Little Turtle Lake, Station No. 5PB₂. Average Discharge: (40 years) - 1,180 cfs. Extremes Recorded: Daily - Maximum, 2 and 3 October 1941, 10,700 cfs, Minimum, 17 March 1918, 50 cfs. Remarks: Records good.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	1,010	774	1,150	708	616	577	543	840	752	912	1,510	608
2.....	986	796	1,130	697	612	574	558	900	807	960	1,410	633
3.....	954	846	1,120	692	608	574	577	906	876	1,020	1,320	650
4.....	936	912	1,100	680	605	574	594	960	986	1,080	1,260	672
5.....	930	954	1,080	675	605	570	622	999	1,180	1,160	1,190	692
6.....	918	973	1,070	672	605	570	650	1,020	1,330	1,240	1,130	724
7.....	930	992	1,070	668	605	567	675	1,020	1,430	1,310	1,070	774
8.....	942	992	1,060	664	605	564	702	1,020	1,470	1,400	1,040	829
9.....	960	1,020	1,040	664	602	558	724	1,030	1,470	1,470	986	846
10.....	966	1,020	1,020	658	602	558	741	1,020	1,460	1,540	954	894
11.....	966	1,010	1,010	658	598	555	746	1,010	1,470	1,610	918	924
12.....	954	986	986	654	598	558	746	1,020	1,470	1,670	888	936
13.....	936	973	960	647	594	552	746	992	1,430	1,740	876	966
14.....	906	986	930	647	591	549	752	960	1,420	1,780	852	999
15.....	888	1,040	912	647	591	540	758	948	1,380	1,800	818	1,010
16.....	882	1,080	888	644	588	540	763	936	1,350	1,850	790	1,020
17.....	906	1,120	864	640	588	540	736	930	1,310	1,900	763	1,040
18.....	930	1,140	834	640	584	540	774	906	1,280	1,910	746	1,050
19.....	936	1,140	824	640	580	540	768	876	1,250	1,950	708	1,040
20.....	936	1,160	802	636	577	538	780	864	1,220	1,960	680	1,040
21.....	930	1,170	790	633	577	535	780	858	1,220	1,970	658	1,010
22.....	918	1,180	774	626	577	535	780	840	1,210	1,990	647	1,020
23.....	912	1,180	774	622	574	535	796	834	1,180	1,990	640	1,010
24.....	882	1,180	768	619	574	532	790	824	1,140	1,960	636	1,010
25.....	876	1,180	758	616	577	530	802	812	1,100	1,940	626	1,020
26.....	864	1,180	746	616	574	530	807	802	1,070	1,920	622	1,020
27.....	846	1,180	746	619	577	530	802	780	1,040	1,900	608	999
28.....	834	1,180	736	619	574	530	790	780	992	1,850	594	930
29.....	818	1,180	730	619	-	530	802	763	954	1,810	594	846
30.....	802	1,170	724	619	-	530	818	758	918	1,720	577	774
31.....	796	-	714	616	-	538	-	752	-	1,620	580	-
Mean	911	1,060	907	647	591	548	731	902	1,210	1,640	861	900
Per sq. mi.	0.48	0.56	0.48	0.34	0.31	0.29	0.39	0.48	0.64	0.87	0.46	0.48
Acre-feet	56,030	62,860	55,760	39,780	32,840	33,700	43,480	55,460	71,730	101,000	52,940	53,530

The Year.....Discharge: Daily - Maximum 22 July, 1,990

- Minimum 25 March, 530

Instantaneous Maximum 5:15 a.m., 22 July, 2,010

Mean 910; Per Square Mile 0.48

Runoff; Acre-feet 659,100; Depth in inches on drainage area 6.53

LA VALLEE RIVER AT LA VALLEE - STATION No. 5PC₉

Location: Lat. 48° 37' 15", long. 93° 37' 30", in NE. 1/4 sec. 22, Devlin Township, Ontario, immediately north of village. Drainage Area: 60 square miles. Gauge: Staff. Measurement of Discharge: From bridge or by wading. Period of Record: Mainly open-water 1951 to date. Extremes Recorded: Daily - Maximum, 14 April 1956, 677 cfs, Minimum, Nil at various times. Remarks: Records good during open-water periods; fair during ice periods.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	45b	47	4	2	3	7	5	7	-	-
2.....	-	-	35	47	4	2	11	6	5	8	-	-
3.....	-	-	20	48	4	4	17	4	6	8	-	-
4.....	-	-	10	58	5	36	28	3	6	8	-	-
5.....	-	-	5	64	6	61	36	3	6	8	-	-
6.....	-	-	0	59	6	68	61	2	7	8	-	-
7.....	-	-	0	48	6	72	93	2	7	4	-	-
8.....	-	-	0	48	8	71	104	1	7	3	-	-
9.....	-	-	0	48	8	64	114	1	7	4	-	-
10.....	-	-	0	33	8	65	122	1	7	5	-	-
11.....	-	-	0	9	7	54	114	0	7	1	-	-
12.....	-	-	0	8	6	42	104	Nil	7	2	-	-
13.....	-	-	0	7	6	34	117	"	6	5	-	-
14.....	-	-	0	6	4	25	162	"	10	8	-	-
15.....	-	-	0	6	4	19	160	"	8	8	-	-
16.....	-	-	0	6	4	13	75	"	8	9	-	-
17.....	-	-	0	6	4	9	54	0	8	10	-	-
18.....	-	-	0	6	4	6	55	1	7	10	-	-
19.....	-	-	0	6	4	5	50	1	6	10	-	-
20.....	-	-	0	6	3	4	42	6	6	11	-	-
21.....	-	-	0	5	3	4	34	3	3	11	-	-
22.....	-	-	0	5	3	3	41	1	2	11	-	-
23.....	-	-	0	5	3	3	38	2	2	17	-	-
24.....	-	-	1	5	3	2	28	1	2	15	-	-
25.....	-	-	1	5	3	2	23	2	4	15	-	-
26.....	-	-	2	5	2	4	19	3	5	5	-	-
27.....	-	-	3	4	2	4	18	3	5	6	-	-
28.....	-	-	4	2	2	3	16	4	6	9	-	-
29.....	-	-	5	2	2	2	14	5	6	9	-	-
30.....	-	-	15b	2	2	2	11	5	7	6	-	-
31.....	-	-	46	-	2	-	8	6	-	6	-	-
Mean	-	-	6.2	20.2	4.3	22.8	57	2.4	5.9	8.0	-	-
Per sq. mi.	-	-	0.10	0.34	0.07	0.38	0.95	0.04	0.10	0.13	-	-
Acre-feet	-	-	381	1,200	262	1,360	3,510	145	353	490	-	-

The Period.....Discharge: Daily - Maximum 14 July, 162
(245 days) - Minimum 15 August, Nil

Mean 15.9; Per Square Mile 0.26

Runoff: Acre-feet 7,700; Depth in inches on drainage area 2.46

b - Ice conditions I to 30 March.

Location: Lat. 48° 41' 15", long. 93° 58' 00", on west boundary of sec. 12, Concession 3, Dobie, Ontario, at traffic bridge, Highway No. 70A. Drainage Area: 65 square miles. Gauge: Staff. Measurement of Discharge: From bridge or by wading. Period of Record: Mainly open water 1951 to date. Extremes Recorded: Daily - Maximum, 20 April 1957, 772 cfs, Minimum, Nil at various times. Remarks: Records good during open-water periods; fair during ice periods.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	5b	95	7.6	1.8	75	8.4	0	0	-	-
2.....	-	-	5	95	9.6	2.8	72	4.8	0	0	-	-
3.....	-	-	5	101	54	15.6	81	2.6	0	0	-	-
4.....	-	-	0	64	40	38.5	93	2.2	0	0	-	-
5.....	-	-	0	60	26.5	84	108	2.0	0	0	-	-
6.....	-	-	0	50	24.0	99	131	1.8	0	0	-	-
7.....	-	-	0	39.0	52	108	153	2.8	0	0	-	-
8.....	-	-	0	27.5	15.6	77	429	3.6	0	0	-	-
9.....	-	-	0	29.0	11.2	54	321	0.4	0	0	-	-
10.....	-	-	0	12.8	7.6	49.0	231	0.2	0	0	-	-
11.....	-	-	0	15.6	14.8	44.5	161	0	0	0	-	-
12.....	-	-	0	21.2	13.2	37.5	123	0	0	0.4	-	-
13.....	-	-	0	19.2	12.8	30.5	90	0	0	3.9	-	-
14.....	-	-	0	12.8	11.6	19.6	132	0	0	5.7	-	-
15.....	-	-	0	7.6	13.6	15.6	258	0	0	5.1	-	-
16.....	-	-	0	9.2	12.0	7.6	328	0	0	3.9	-	-
17.....	-	-	0	7.6	11.6	0.3	216	0	0	2.8	-	-
18.....	-	-	0	8.8	9.6	0.9	136	0	0	2.4	-	-
19.....	-	-	0	9.6	7.6	1.8	90	0	0	1.6	-	-
20.....	-	-	0	8.8	7.2	4.8	88	0	0	1.2	-	-
21.....	-	-	0	8.4	5.7	4.8	43.5	0	0	0.8	-	-
22.....	-	-	1	5.7	2.8	5.7	93	0	0	0.6	-	-
23.....	-	-	1	5.1	1.8	2.4	42.0	0	0	1.4	-	-
24.....	-	-	1	4.8	1.4	0.9	41.5	0	0	1.2	-	-
25.....	-	-	20	4.5	1.0	1.8	31.5	0	0	1.0	-	-
26.....	-	-	52	4.5	0.9	3.6	24.0	0	0	0.9	-	-
27.....	-	-	73b	4.2	0.9	2.8	23.0	0	0	0.8	-	-
28.....	-	-	111	4.2	0.8	1.0	20.4	0	0	0.6	-	-
29.....	-	-	139	6.4	0.6	1.4	19.6	0	0	0.5	-	-
30.....	-	-	132	8.8	0.4	0	15.6	0	0	0.5	-	-
31.....	-	-	104	-	1.8	-	13.6	0	0	0.5	-	-
Mean	-	-	20.9	25.0	12.3	23.9	118.8	0.9	0	1.2	-	-
Per sq. mi.	-	-	0.32	0.38	0.19	0.37	1.83	0.01	0	0.02	-	-
Acre-feet	-	-	1,290	1,490	754	1,420	7,310	57	0	71	-	-

The Period..... Discharge: Daily - Maximum 8 July, 429
(245 days) - Minimum, at various times 0

Mean 25.5; Per Square Mile 0.39

Runoff: Acre-feet 12,390; Depth in inches on drainage area 3.56

b - Ice conditions 1 to 27 March.

PINEWOOD RIVER NEAR PINEWOOD - STATION No. 5PC₁₁

Location: Lat. 48° 45' 10", long. 94° 14' 00", Ontario, four miles northeast of Pinewood (corrected). Drainage Area: 178 square miles (corrected). Gauge: Recording. Measurement of Discharge: From bridge or by wading. Period of Record: Mainly open water June 1951 to date. Extremes Recorded: Daily - Maximum, 22 April 1957, 1,990 cfs, Minimum, Nil at various times. Remarks: Records good during open-water periods; fair during ice periods.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	30 ^b	119b	19	32	40	53	6	12	-	-
2.....	-	-	11	144x	23	32	257	55	6	17	-	-
3.....	-	-	8	157	38	41	331	59	5	15	-	-
4.....	-	-	0	144	74	87	380	53	4	11	-	-
5.....	-	-	0	117	95	231	503	49	3	8	-	-
6.....	-	-	0	101	83	308	615	41	3	8	-	-
7.....	-	-	0	85	66	316	703	32	3	6	-	-
8.....	-	-	0	71	54	249	682	28	3	6	-	-
9.....	-	-	0	61	45	186	626	25	3	7	-	-
10.....	-	-	0	53	39	144	546	21	3	11	-	-
11.....	-	-	0	39	36	144	420	19	3	83	-	-
12.....	-	-	0	12	33	129	338	17	3	34	-	-
13.....	-	-	0	17	30	112	225x	19	3	23	-	-
14.....	-	-	0	12	32	87	767	13	3	23	-	-
15.....	-	-	0	8	30	71	799	12	3	24	-	-
16.....	-	-	0	11	29	59	781	9	4	25	-	-
17.....	-	-	0	18	23	52	803	7	5	23	-	-
18.....	-	-	0	26	22	44	522	5	6	22	-	-
19.....	-	-	0	19	25	66	390	4	4	20	-	-
20.....	-	-	0	20	24	80	341	4	4	19	-	-
21.....	-	-	0	39	21	71	276x	3	3	17	-	-
22.....	-	-	0	21	21	57	237	3	4	18	-	-
23.....	-	-	0	23	18	47	337	3	4	16	-	-
24.....	-	-	5	27	17	38	351	3	5	15	-	-
25.....	-	-	2	26	11	34	310	3	4	14	-	-
26.....	-	-	3	16	16	37	242	4	5	13	-	-
27.....	-	-	3	13	12	36	248	5	6	14	-	-
28.....	-	-	3	14	9	32	233	7	5	15	-	-
29.....	-	-	35	12	8	25	201	6	5	15	-	-
30.....	-	-	64	17	9	21	157x	5	6	14	-	-
31.....	-	-	99	-	17	-	123	6	-	15x	-	-
Mean	-	-	8.5	48.1	31.6	96	413	18.5	4.1	18.2	-	-
Per sq. mi.	-	-	0.05	0.27	0.18	0.54	2.32	0.10	0.02	0.10	-	-
Acre-feet	-	-	522	2,860	1,940	5,700	25,360	1,140	246	1,120	-	-

The Period..... Discharge: Daily - Maximum 17 July, 803

(245 days) - Minimum in March, 0

Mean 80; Per Square Mile 0.45

Runoff: Acre-feet 38,890; Depth in inches on drainage area 4.11

b - Ice conditions 1 March to 1 April.

x - Staff gauge readings 1 March to 2 April, 13 to 21 July and 30 July to 31 October.

STORAGE, OUTFLOW AND INFLOW

Supply factors for Rainy Lake as set forth in the following tables have been compiled by the Lake of the Woods Control Board from records furnished by the Water Resources Branch. Records Available: 25 October 1905 to date. Storage: Rainy Lake area taken as 345 square miles. Changes in storage based on elevations at Fort Frances. Outflow: Daily records of total outflow based on discharges recorded by the Water Resources Branch, and constant reservoir capacity, and as such subject to revision by the International Rainy Lake Board of Control. Inflow: Ten-day and monthly-mean inflows computed from mean outflows with the addition or subtraction of flow equivalent to recorded change in storage. Regulation: Lake level and outflow regulated by Water Resources Branch, through the operation of the Minnesota and Ontario Power Company's dam at International Falls. Inflow to Rainy Lake from Namakan Lake controlled by the dam at the outlet of Namakan Lake.

Mean Daily Outflow in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	9,800	9,150	3,820	6,800	9,820	9,240	8,380	3,520	3,380	3,520	5,460	3,400
2.....	9,730	8,380	8,790	10,200	7,990	4,540	8,360	3,880	3,040	3,620	4,640	3,770
3.....	9,900	2,890	8,030	10,000	9,630	7,900	8,460	4,290	1,040	3,820	5,740	3,670
4.....	8,730	7,780	9,460	9,220	9,920	9,820	8,370	4,370	3,170	3,760	4,390	3,480
5.....	10,100	8,950	9,250	4,740	10,000	9,320	8,640	3,500	3,300	4,800	3,720	3,930
6.....	2,970	9,180	9,940	10,400	9,210	9,100	3,800	4,750	3,420	2,380	3,160	4,120
7.....	7,770	9,800	9,540	10,300	8,460	8,280	7,040	4,370	3,700	2,630	3,400	3,370
8.....	8,280	10,500	4,260	10,200	9,760	8,880	8,550	4,840	2,860	4,940	2,970	3,830
9.....	8,720	10,100	8,570	10,300	4,140	7,860	8,580	3,980	3,100	4,170	3,450	4,000
10.....	9,480	3,580	10,500	10,100	8,780	7,980	8,380	3,960	3,540	3,600	3,560	3,440
11.....	9,420	8,180	10,400	9,920	9,000	9,180	8,340	2,400	3,100	4,020	3,160	3,950
12.....	10,300	10,500	10,400	5,210	9,450	9,160	6,240	2,660	2,970	3,220	3,240	3,470
13.....	2,890	9,610	10,500	8,930	9,400	9,240	3,400	2,830	2,900	1,980	3,190	3,100
14.....	8,670	9,940	10,600	10,300	9,740	9,370	5,780	2,660	3,080	2,250	3,300	3,360
15.....	9,580	10,400	5,580	10,500	8,980	8,460	6,500	2,420	3,020	4,130	3,380	3,240
16.....	10,400	9,840	9,860	10,500	7,940	5,380	7,580	2,780	3,020	5,570	3,930	3,300
17.....	10,200	3,760	10,400	10,500	10,100	8,940	6,900	2,710	3,620	7,480	3,530	3,130
18.....	9,900	8,020	10,500	10,500	8,780	9,680	7,120	3,080	3,400	5,960	3,180	3,280
19.....	9,290	10,400	10,500	6,450	10,100	9,660	7,930	3,010	3,300	5,490	3,020	4,100
20.....	2,920	10,400	10,500	9,800	9,260	9,420	3,120	2,900	3,600	2,820	3,230	4,260
21.....	7,720	10,500	10,600	9,920	8,340	9,990	3,730	2,640	3,150	7,130	3,540	3,290
22.....	8,380	9,700	3,800	10,100	8,500	9,860	6,430	2,800	4,210	8,170	4,000	3,550
23.....	10,500	10,300	8,140	9,600	7,040	8,760	5,300	3,250	3,520	8,740	4,660	3,600
24.....	10,700	4,210	5,880	10,200	7,240	8,540	5,530	3,230	3,500	9,110	3,860	4,250
25.....	10,800	8,280	4,780	10,100	8,000	9,640	5,700	505	3,630	8,170	3,830	4,350
26.....	10,700	9,740	10,200	5,000	8,540	9,840	3,540	2,860	3,740	6,090	4,040	3,620
27.....	2,820	10,200	10,500	9,730	9,060	9,930	3,320	3,400	3,370	4,310	4,010	4,600
28.....	9,360	6,420	10,100	9,760	8,560	10,000	4,390	3,490	3,900	4,810	4,050	3,150
29.....	10,500	6,720	5,980	9,730	-	9,480	4,050	3,640	3,470	5,160	4,160	3,130
30.....	10,400	5,720	7,560	9,780	-	7,600	3,980	990	3,510	7,200	4,550	4,190
31.....	8,500	-	5,920	9,400	-	7,540	-	3,650	-	6,540	3,150	-
Mean	8,690	8,440	8,540	9,300	8,780	8,790	6,250	3,210	3,290	5,020	3,790	3,660

Storage, Outflow and Inflow for Water Year 1957-58

Drainage Area - 14,900 square miles

Date	Mean Lake Level For Month in Feet	Lake Level 1st of Following Month in Feet	Change in Level		Equivalent Storage in cfs	Controlled Outflow cfs	Inflow cfs	Inflow	
			Rise Feet	Fall Feet				Per Square Mile cfs	Runoff Depth in Inches
October	1,107.13	1,106.89	-	-0.45	-1,620	8,690	7,070	0.41	0.47
November	1,106.96	1,107.10	0.21	-	780	8,440	9,220	0.62	0.69
December	1,107.03	1,106.87	-	-0.23	- 830	8,540	7,710	0.52	0.60
January	1,106.58	1,106.23	-	-0.64	-2,300	9,300	7,000	0.47	0.54
February	1,105.88	1,105.58	-	-0.65	-2,590	8,780	6,190	0.42	0.44
March	1,105.19	1,104.75	-	-0.83	-2,980	8,790	5,810	0.39	0.45
April	1,104.60	1,104.38	-	-0.37	-1,370	6,250	4,880	0.33	0.37
May	1,104.32	1,104.27	-	-0.11	- 400	3,200	2,800	0.19	0.22
June	1,104.45	1,104.56	0.29	-	1,080	3,280	4,360	0.29	0.32
July	1,104.82	1,104.90	0.34	-	1,220	5,020	6,240	0.42	0.48
August	1,105.13	1,105.14	0.24	-	860	3,790	4,650	0.31	0.36
September	1,105.08	1,105.10	-	-0.04	- 150	3,660	3,510	0.24	0.27

RAINY LAKE AT FORT FRANCES - STATION No. 5PB₇

(International Gauging Station)

Location: Lat. 48° 37' 15", long. 93° 21' 20", Ontario, on Government Dock at Pither's Point. Gauge: Recording; elevations referred to United States and Canada Boundary Survey datum. Period of Record: January 1950 to date. Extremes Recorded: Daily - Maximum, 5 July 1950, 1,112.97 feet, Minimum, 2 April 1930, 1,101.26 feet. Remarks: Data for August 1911 to December 1949 were obtained at Ranier, Minnesota, Station No. 5PB₅. This station is maintained by Canada under agreement with United States.

Daily Elevations in Feet for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	7.34	6.89	7.10	6.87	6.23e	5.58	4.75	4.38	4.31	4.56	4.90	5.14
2.....	7.34	6.94	7.12	6.86	6.19e	5.56	4.73	4.42	4.28	4.57	4.90	5.11
3.....	7.31	6.88	7.14	6.84	6.16	5.55	4.72	4.38	4.31	4.64	4.95	5.06
4.....	7.29	6.88	7.14	6.83	6.13	5.53	4.73	4.42	4.38	4.68	5.00	5.08
5.....	7.25	6.87	7.15	6.82	6.10	5.51	4.74	4.39	4.44	4.67	4.92	5.12
6.....	7.25	6.87	7.13	6.80	6.06	5.47	4.70	4.38	4.39	4.65	4.94	5.06
7.....	7.29	6.96	7.14	6.80	6.04	5.47	4.68	4.36	4.43	4.72	5.03	5.02
8.....	7.28	6.95	7.13	6.77	6.02	5.44	4.68	4.37	4.48	4.74	5.06	5.04
9.....	7.25	6.89	7.14	6.74	5.99	5.41	4.66	4.38	4.46	4.79	5.10	5.03
10.....	7.25	6.91	7.12	6.69	5.99	5.38	4.65	4.35	4.46	4.75	5.13	5.04
11.....	7.24	6.96	7.11	6.70	5.97	5.35	4.64	4.34	4.45	4.77	5.14	4.98
12.....	7.22	6.97	7.11	6.66	5.95	5.31	4.64	4.36	4.49	4.85	5.14	5.03
13.....	7.21	6.98	7.07	6.67	5.93	5.28	4.65	4.30	4.48	4.85	5.23	5.03
14.....	7.23	7.02	7.06	6.64	5.89	5.25	4.65	4.30	4.51	4.84	5.20	5.02
15.....	7.22	7.02	7.05	6.62	5.86	5.22	4.65	4.31	4.51	4.96	5.26	4.98
16.....	7.18	6.99	7.05	6.59	5.85	5.20	4.66	4.32	4.51	4.96	5.21	5.06
17.....	7.18	6.99	7.05	6.56	5.82	5.19	4.57	4.33	4.51	4.93	5.26	5.09
18.....	7.14	7.08	7.02	6.53	5.77	5.16	4.62	4.24	4.51	4.88	5.26	5.09
19.....	7.09	7.03	6.99	6.50	5.76	5.12	4.53	4.22	4.45	4.98	5.25	5.10
20.....	7.09	6.99	6.98	6.49	5.71	5.09	4.55	4.23	4.46	4.96	5.24	5.08
21.....	7.11	6.98	6.95	6.46	5.67	5.06	4.58	4.30	4.47	4.96	5.21	5.00
22.....	7.15	6.99	6.95	6.43	5.66	5.02	4.57	4.30	4.47	4.98	5.21	5.08
23.....	7.13	6.89	6.93	6.40	5.64	4.99	4.55	4.28	4.47	4.97	5.27	5.11
24.....	7.03	7.01	6.95	6.39	5.64	4.95	4.50	4.28	4.48	4.90	5.25	5.09
25.....	7.00	7.05	6.95	6.35	5.67	4.92	4.48	4.28	4.49	4.86	5.19	5.11
26.....	6.93	7.05	6.95	6.34	5.65	4.88	4.46	4.24	4.48	4.92	5.21	5.08
27.....	6.90	7.01	6.91	6.34	5.66	4.85	4.42	4.21	4.47	4.94	5.16	5.11
28.....	6.94	7.05	6.88	6.32	5.60	4.81	4.25	4.25	4.49	4.84	5.19	5.13
29.....	6.90	7.00	6.88	6.30	-	4.78	4.33	4.23	4.49	4.82	5.18	5.10
30.....	6.85	7.08	6.88	6.28	-	4.77	4.32	4.30	4.51	4.90	5.16	5.08
31.....	6.84	-	6.88	6.25e	-	4.76	-	4.34	-	4.90	5.17	-

Add 1,100.00 to obtain elevation in feet, United States and Canada Boundary Survey datum.

e - Estimated.

Location: Lat. 49° 46' 20", long. 94° 30' 10", Ontario, at Kenora Power House. Drainage Area: 27,170 square miles (common to four outlets). Gauge: Staff. Measurement of Discharge: From cableway. Period of Record: August 1907 to date. Remarks: Only a portion of the lake outflow passes through the Eastern Outlet.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	4,780	5,000	4,830	4,840	5,190	5,230	5,160	5,120	4,270	2,450	3,010	3,350
2.....	4,920	4,950	4,890	5,020	5,060	5,240	5,160	5,150	2,870	3,150	2,990	3,320
3.....	5,090	5,010	5,920	5,060	5,020	5,240	5,290	5,100	2,970	3,320	3,520	2,930
4.....	5,000	4,980	4,960	4,830	5,050	5,200	5,290	5,180	3,140	2,970	3,580	2,620
5.....	5,090	5,030	5,000	4,560	4,960	5,190	5,260	5,200	3,080	2,860	2,550	2,560
6.....	5,130	4,690	5,020	4,800	5,060	5,200	5,290	5,190	3,170	2,670	2,480	2,620
7.....	5,170	4,890	4,900	4,830	5,060	5,190	5,170	5,080	2,930	2,950	2,570	3,300
8.....	5,040	4,830	4,930	4,830	5,030	5,190	5,090	5,110	2,700	2,410	2,540	2,730
9.....	4,790	4,900	4,880	4,860	5,060	5,160	5,200	5,080	2,580	3,070	2,530	2,630
10.....	4,700	4,670	4,870	4,890	5,060	5,130	4,890	5,070	2,870	2,280	2,410	2,350
11.....	4,890	4,930	4,860	4,920	5,030	5,160	5,190	5,120	2,740	2,480	2,460	2,400
12.....	2,660	4,990	4,860	4,950	5,130	5,130	5,250	5,230	2,540	2,240	3,270	2,430
13.....	2,590	4,990	4,830	4,890	5,160	5,160	5,230	4,850	3,560	2,500	2,780	2,670
14.....	4,940	4,990	4,790	4,890	5,130	5,160	5,220	4,930	3,770	2,320	3,440	2,660
15.....	4,980	4,990	4,900	4,890	5,120	5,130	5,000	4,940	2,650	2,290	3,540	2,380
16.....	4,890	4,890	4,890	4,920	5,160	5,200	5,090	4,880	2,800	2,440	3,590	2,860
17.....	4,850	4,930	4,830	4,860	5,100	5,140	5,180	4,790	2,310	2,870	3,160	2,750
18.....	5,080	4,830	4,830	4,920	5,130	5,130	5,210	4,980	2,930	2,290	3,290	2,760
19.....	5,160	4,960	4,960	4,940	5,100	5,130	5,150	4,820	3,480	2,450	3,030	2,640
20.....	5,090	4,960	4,830	4,900	5,130	5,130	5,090	4,830	3,060	3,370	2,840	2,390
21.....	5,190	5,020	4,860	4,950	5,130	5,090	5,090	4,690	2,530	2,950	2,670	3,180
22.....	5,070	4,960	4,840	4,960	5,060	5,090	5,080	4,720	2,490	2,690	2,790	2,070
23.....	5,070	4,890	4,710	4,990	5,190	5,120	5,080	4,850	2,820	2,380	2,980	2,670
24.....	5,140	4,990	4,840	4,990	5,120	5,110	5,080	4,660	3,300	2,680	2,920	2,740
25.....	5,070	4,780	4,840	5,020	5,260	4,980	5,150	4,810	2,720	2,810	2,950	2,610
26.....	5,090	4,890	4,770	5,030	5,160	5,050	5,180	4,710	2,880	2,710	2,550	2,470
27.....	5,090	4,990	4,980	5,060	5,190	5,120	4,990	4,520	2,630	1,930	2,620	2,390
28.....	4,930	4,840	4,760	5,120	5,190	5,150	5,160	4,520	2,560	3,460	2,790	3,320
29.....	5,070	4,980	4,990	5,090	-	5,050	5,050	4,410	2,390	2,860	2,840	2,050
30.....	4,940	4,870	4,800	5,090	-	5,320	5,120	4,290	2,940	2,650	2,910	2,160
31.....	5,010	-	4,860	5,200	-	5,180	-	3,980	-	2,870	3,290	-
Mean	4,860	4,930	4,900	4,940	5,110	5,160	5,150	4,860	2,920	2,690	2,930	2,670
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	298,500	293,300	301,500	303,700	283,700	317,200	306,200	299,100	173,900	165,400	180,300	158,700

The Year.....Discharge: Daily - Maximum 3 December, 5,920
 - Minimum 27 July, 1,930
 Mean 4,260;
 Runoff: Acre-feet 3,081,500

Discharge per square mile and runoff depth in inches omitted as outlet is one of several from Lake of the Woods.

WESTERN OUTLET AT NORMAN DAM POWER HOUSE - STATION No. 5PE₂

Location: Lat. 49° 46' 15", long. 94° 31' 25", Ontario, at Norman Dam Power House. Drainage Area: 27,170 square miles (common to four outlets). Measurement of Discharge: From bridge. Period of Record: April 1913 to date. Remarks: Only a portion of the lake outflow passes through the Western Outlet.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	5,650	7,220	7,040	8,160	7,360	7,000	6,040	6,160	2,130	2,670	4,100	60
2.....	5,850	7,200	7,110	8,140	6,620	7,100	5,990	5,770	875	5,280	3,790	5,940
3.....	5,860	7,440	7,110	8,580	7,150	7,070	6,010	6,000	5,050	5,710	60	6,040
4.....	5,880	7,220	7,090	8,540	7,160	7,570	5,960	2,510	4,960	5,590	60	5,840
5.....	5,910	7,450	7,080	8,040	7,080	6,890	5,940	3,370	5,140	5,220	3,620	6,590
6.....	5,540	7,350	7,930	8,380	6,970	7,040	6,100	5,730	5,060	2,630	3,480	6,200
7.....	5,230	7,100	8,720	8,480	7,360	7,060	6,010	5,660	4,840	1,110	3,680	60
8.....	5,880	7,050	8,470	8,350	6,880	7,100	6,040	5,670	2,660	5,280	3,670	60
9.....	5,870	7,190	8,430	8,320	6,850	7,160	5,820	5,690	992	4,680	3,480	6,000
10.....	5,900	4,830	8,390	8,440	7,060	7,050	5,610	5,690	4,650	3,480	60	6,540
11.....	6,120	7,640	8,360	8,280	7,080	6,960	5,650	2,640	5,040	3,080	60	6,190
12.....	5,540	7,390	8,340	8,280	7,130	7,030	5,550	3,310	4,930	3,160	1,080	6,440
13.....	5,570	7,220	8,320	8,190	7,140	6,880	2,830	5,760	5,000	788	3,380	6,620
14.....	5,580	7,110	8,410	8,270	7,110	6,750	2,620	5,980	5,180	60	5,110	550
15.....	6,100	7,120	8,460	8,250	7,160	6,870	4,800	6,030	2,470	3,650	5,370	329
16.....	5,860	7,110	8,270	8,220	7,050	6,820	5,800	5,970	2,500	2,880	5,090	6,880
17.....	6,120	7,310	8,220	8,130	7,050	6,780	5,750	5,880	5,340	2,810	778	6,960
18.....	6,280	7,080	8,260	8,270	7,100	6,800	5,770	2,280	5,350	4,340	1,010	6,820
19.....	6,540	6,970	8,250	8,180	7,010	6,700	5,640	2,830	5,590	5,160	2,700	6,410
20.....	6,390	7,010	8,250	8,210	7,090	6,750	1,200	5,880	5,510	167	3,070	6,050
21.....	6,260	7,120	8,270	8,230	7,050	6,720	4,750	5,810	5,250	60	3,130	60
22.....	6,060	7,390	8,090	8,160	7,120	6,660	5,620	5,800	2,450	4,750	3,040	60
23.....	6,010	7,320	8,270	8,230	7,030	6,250	5,570	5,770	1,860	3,370	2,670	6,740
24.....	6,020	7,240	8,390	8,180	6,990	6,780	5,880	5,780	5,060	2,650	60	6,720
25.....	6,060	7,160	8,340	8,260	7,070	6,730	5,690	2,280	5,420	3,640	60	6,580
26.....	7,470	7,260	8,250	8,110	6,990	6,720	5,500	2,960	5,360	3,820	2,560	6,580
27.....	7,120	7,160	8,180	8,130	7,080	6,680	2,400	5,800	5,480	60	2,650	6,440
28.....	7,340	7,150	8,170	8,160	6,960	6,680	3,260	5,820	4,770	60	3,380	60
29.....	7,440	7,110	8,120	8,160	-	6,670	5,780	5,780	2,530	3,560	4,510	540
30.....	7,420	7,160	8,180	8,060	-	6,820	5,690	5,780	3,400	3,510	4,770	6,130
31.....	7,430	-	8,290	7,230	-	6,030	-	5,670	-	3,860	60	-
Mean	6,200	7,140	8,100	8,210	7,060	6,840	5,180	5,030	4,160	3,130	2,600	4,550
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	381,400	424,600	498,000	505,000	392,100	420,700	308,000	309,500	247,600	192,600	159,700	270,700

The Year.....Discharge: Daily - Maximum 7 December, 8,720
 - Minimum at various times in July, August and September, 60
 Mean 5,680;
 Runoff: Acre-feet 4,109,900

Discharge per square mile and runoff depth in inches omitted as outlet is one of several from Lake of the Woods.

OUTLET AT MILL "A" KEEWATIN - STATION No. 5PE₃

Location: Lat. 49° 45' 50", long. 94° 33' 30", Ontario, at Lake of the Woods Milling Company. Drainage Area: 27,170 square miles (common to four outlets). Gauge: Staff. Measurement of Discharge: From bridge. Period of Record: February 1913 to date. Remarks: Only a portion of the lake outflow passes through this outlet.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	177	193	172	171	<u>142</u>	<u>150</u>	204	<u>228</u>	114	111	181	115
2.....	182	172	206	213	<u>168</u>	<u>165</u>	201	<u>213</u>	189	<u>205</u>	132	196
3.....	170	<u>120</u>	202	207	204	207	207	172	204	<u>205</u>	107	205
4.....	170	<u>187</u>	196	186	201	201	213	156	201	211	107	222
5.....	179	187	199	171	198	207	174	215	208	181	193	202
6.....	103	172	209	204	192	207	159	201	216	163	196	133
7.....	166	190	189	210	195	210	207	210	<u>137</u>	198	172	<u>102</u>
8.....	182	201	159	195	171	162	216	216	117	195	132	195
9.....	189	172	207	204	168	156	210	219	184	202	115	208
10.....	176	130	222	<u>228</u>	213	204	195	168	195	199	107	220
11.....	176	128	222	189	219	201	204	150	198	204	131	193
12.....	186	190	210	134	222	216	164	192	204	137	182	199
13.....	112	190	207	219	222	201	<u>150</u>	189	201	113	184	174
14.....	119	193	168	222	177	202	<u>190</u>	199	114	199	187	126
15.....	174	202	<u>146</u>	228	189	171	204	193	106	195	189	190
16.....	163	154	210	228	171	165	213	190	177	192	121	214
17.....	186	135	207	207	231	210	213	172	177	195	127	208
18.....	176	203	204	178	231	214	207	153	180	204	178	205
19.....	<u>82</u>	196	207	174	228	214	171	156	201	162	190	222
20.....	<u>121</u>	193	210	222	231	208	192	198	211	<u>109</u>	<u>203</u>	191
21.....	186	196	156	213	219	196	209	208	<u>112</u>	190	192	154
22.....	198	181	162	208	189	202	225	220	118	195	163	211
23.....	<u>179</u>	172	213	228	162	165	<u>213</u>	199	189	201	126	231
24.....	195	137	201	226	204	198	220	<u>115</u>	198	171	118	239
25.....	189	<u>212</u>	156	210	207	210	219	<u>120</u>	196	180	203	228
26.....	151	199	213	192	201	208	168	207	205	168	199	222
27.....	154	193	207	207	<u>233</u>	205	156	217	196	190	190	194
28.....	190	193	192	199	<u>226</u>	208	209	208	100	187	201	160
29.....	187	202	<u>225</u>	202	-	175	207	208	112	199	192	220
30.....	187	187	219	208	-	161	210	202	120	199	192	224
31.....	190	-	207	208	-	213	-	155	-	184	123	-
Mean	168	179	197	203	200	194	198	189	169	182	162	193
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	-	-	-	-	-	-	-	-	-	-

The Year..... Discharge: Daily - Maximum 24 September, 239
 - Minimum 19 October, 82
 Mean 186

LAKE OF THE WOODS

OUTLET AT MILL "C" KEEWATIN - STATION No. 5PE₄

Location: Lat. 49° 45' 50", long. 94° 33' 20", Ontario, at Lake of the Woods Milling Company. Drainage Area: 27,170 square miles (common to four outlets). Gauge: Staff. Measurement of Discharge: From bridge. Period of Record: July 1912 to date. Remarks: Only a portion of the lake outflow passes through this outlet.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	836	871	110	110	134	133	842	821	110	110	0	110
2.....	852	110	942	950	110	110	915	934	969	947	0	881
3.....	834	110	880	968	851	845	899	925	933	1,080	0	943
4.....	850	944	858	909	921	843	925	110	884	1,080	0	945
5.....	733	815	894	110	887	875	312	934	948	1,170	0	911
6.....	110	900	840	914	914	874	110	938	883	953	0	139
7.....	835	911	110	927	925	884	883	960	110	962	0	110
8.....	844	857	110	958	110	110	897	956	110	1,090	0	905
9.....	784	823	931	893	110	110	885	899	757	1,100	0	950
10.....	822	110	930	924	878	888	884	110	939	1,100	0	906
11.....	794	110	868	891	892	916	898	110	887	1,030	38	933
12.....	742	847	869	131	903	919	903	829	933	110	871	893
13.....	110	899	941	922	917	885	110	894	932	110	803	110
14.....	110	866	158	959	909	916	900	897	110	1,090	872	110
15.....	836	871	110	937	110	110	880	962	110	960	842	956
16.....	800	892	1,010	928	110	110	895	977	850	957	110	968
17.....	838	110	899	963	911	888	911	110	822	953	110	931
18.....	859	923	917	139	906	885	928	110	930	1,040	871	929
19.....	162	924	861	110	892	920	905	110	947	481	898	992
20.....	110	878	833	956	909	917	862	903	952	110	838	909
21.....	858	838	792	911	884	878	905	935	110	919	902	110
22.....	887	886	110	953	110	263	962	914	110	948	110	1,020
23.....	876	443	976	922	110	110	914	1,010	909	893	110	954
24.....	882	110	324	883	815	887	903	124	943	851	110	1,020
25.....	856	920	110	110	888	899	889	110	983	930	881	995
26.....	825	927	856	110	905	912	431	910	937	847	871	1,040
27.....	110	898	921	965	903	918	110	944	948	783	858	1,010
28.....	842	893	948	927	933	898	908	1,020	127	0	847	110
29.....	771	894	822	966	-	880	892	957	110	0	847	917
30.....	748	384	970	925	-	110	932	1,040	110	0	110	949
31.....	853	-	339	899	-	843	-	110	-	0	110	-
Mean	689	699	685	747	673	669	786	696	647	729	387	755
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	-	-	-	-	-	-	-	-	-	-

The Year..... Discharge: Daily - Maximum 5 July, 1,170
 - Minimum 28 July to 10 August, 0
 Mean 680

Supply factors for the Lake of the Woods as set forth in the following tables have been compiled by the Lake of the Woods Control Board from records secured at the lake outlets by the Water Resources Branch and from records at Warroad by the United States Corps of Engineers. The following description outlines the period of records and the factors entering into the compilation. Records available: 1 October 1892 to date. Records up to 31 December 1915 have been published in the final report of the International Joint Commission on the levels of the Lake of the Woods, and from 1 January 1909 to 31 December 1927 in the Preliminary Report of the International Joint Commission relating to Official Reference re Levels of Rainy Lake and Other Upper Waters. Storage: Lake of the Woods area including that of Shoal Lake taken as 1,485 square miles. Daily elevations at Warroad, Kenora and Keewatin are graphically corrected for wind effect and used as a basis for determining changes in storage. Outflow: Daily records of total outflow compiled from the discharge through the eastern outlet, western outlet, Mill "A" and Mill "C". Inflow: Ten-day and monthly-mean inflows computed from the mean outflow with the addition or subtraction of flow equivalent to the recorded change in storage. Regulation: Lake levels and outflow regulated through the operation of control works at the lake outlets. Inflow from Rainy Lake controlled by dams at the outlets of Rainy and Namakan Lakes.

Combined Daily Discharge in Cubic Feet per Second below all outlets for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	11,400	13,300	12,200	13,300	12,800	12,500	12,200	12,300	6,620	5,340	7,290	3,640
2.....	11,800	12,400	13,100	14,300	12,000	12,600	12,300	12,100	4,900	9,580	6,910	10,300
3.....	12,000	12,700	14,100	14,800	13,200	13,400	12,400	12,200	9,160	10,300	3,690	10,100
4.....	11,900	13,300	13,100	14,500	13,300	13,800	12,400	7,960	9,180	9,850	3,750	9,630
5.....	11,900	13,500	13,200	12,900	13,100	13,200	11,700	9,720	9,380	9,430	6,360	10,300
6.....	10,900	13,400	14,000	14,300	13,100	13,300	11,700	12,100	9,330	6,420	6,160	9,090
7.....	11,400	13,100	13,900	14,400	13,500	13,300	12,300	11,900	8,020	5,220	6,420	3,570
8.....	11,900	12,900	13,700	14,300	12,200	12,600	12,200	12,000	5,590	8,980	6,340	3,890
9.....	11,600	13,100	14,400	14,300	12,200	12,600	12,100	11,900	4,510	9,050	6,120	9,790
10.....	11,600	9,740	14,400	14,500	13,200	13,300	11,600	11,000	8,650	7,060	2,580	10,000
11.....	12,000	12,800	14,300	14,300	13,200	13,200	11,900	8,020	8,860	6,790	2,690	9,720
12.....	9,130	13,400	14,300	13,500	13,400	13,300	11,900	9,560	8,610	5,650	5,400	9,960
13.....	8,380	13,300	14,300	14,200	13,400	13,100	8,320	11,700	9,690	3,510	7,150	9,570
14.....	10,700	13,200	13,500	14,300	13,300	13,000	8,930	12,000	9,170	3,670	9,610	3,450
15.....	12,100	13,200	13,600	14,300	12,600	12,300	10,900	12,100	5,340	7,100	9,940	3,860
16.....	11,700	13,000	14,400	14,300	12,500	12,300	12,000	12,000	6,330	6,470	8,910	10,900
17.....	12,000	12,500	14,200	14,200	13,300	13,000	12,100	11,000	8,650	6,830	4,180	10,800
18.....	12,400	13,000	14,200	13,500	13,400	13,000	12,100	7,520	9,390	7,870	5,350	10,700
19.....	11,900	13,000	14,300	13,400	13,200	13,000	11,900	7,920	10,200	8,250	6,820	10,300
20.....	11,700	13,000	14,100	14,300	13,400	13,000	7,340	11,800	9,730	3,760	6,950	9,540
21.....	12,500	13,200	14,100	14,300	13,300	12,900	11,000	11,600	8,000	4,120	6,890	3,500
22.....	12,200	13,400	13,200	14,300	12,500	12,200	11,900	11,700	5,170	8,580	6,100	3,360
23.....	12,100	12,800	14,200	14,400	12,500	11,600	11,800	11,800	5,780	6,840	5,890	10,600
24.....	12,200	12,500	13,800	14,300	13,100	13,000	12,100	10,700	9,500	6,350	3,210	10,700
25.....	12,200	13,100	13,400	13,600	13,400	12,800	11,900	7,320	9,320	7,560	4,090	10,400
26.....	13,500	13,300	14,100	13,400	13,300	12,900	11,300	8,790	9,380	7,540	6,180	10,300
27.....	12,500	13,200	14,300	14,400	13,400	12,900	7,660	11,500	9,250	2,960	6,320	10,000
28.....	13,300	13,100	14,100	14,400	13,300	12,900	9,540	11,600	7,560	3,710	7,220	3,650
29.....	13,500	13,200	14,200	14,400	-	13,000	11,900	11,400	5,140	6,620	8,390	3,730
30.....	13,300	12,600	14,200	14,300	-	12,400	12,000	11,300	6,570	6,360	7,980	9,460
31.....	13,500	-	13,700	13,500	-	12,300	-	9,920	-	6,910	3,580	-
Mean	11,900	12,900	13,900	14,100	13,000	12,900	11,300	10,800	7,900	6,730	6,080	8,160

Summary of Lake Levels, Outflow and Inflow for Water Year 1957-58

Drainage Area - 27,170 square miles

Date	Mean Lake Level For Month in Feet	Lake Level 1st of Following Month in Feet	Change in Level		Equivalent Storage in cfs	Controlled Outflow cfs	Inflow cfs	Inflow	
			Rise Feet	Fall Feet				Per Square Mile cfs	Runoff Depth in Inches
October	1,060.60	1,060.53	-	-0.12	-1,860	11,900	10,040	0.37	0.43
November	1,060.40	1,060.30	-	-0.23	-3,670	12,900	9,230	0.34	0.38
December	1,060.15	1,059.95	-	-0.35	-5,410	13,900	8,490	0.31	0.36
January	1,059.78	1,059.62	-	-0.33	-5,100	14,100	9,000	0.33	0.38
February	1,059.48	1,059.36	-	-0.26	-4,450	13,000	8,550	0.31	0.32
March	1,059.22	1,059.11	-	-0.25	-3,860	12,900	9,040	0.33	0.38
April	1,059.02	1,058.88	-	-0.23	-3,670	11,300	7,630	0.30	0.34
May	1,058.60	1,058.27	-	-0.61	-9,430	10,800	1,370	0.05	0.06
June	1,058.18	1,058.15	-	-0.12	-1,920	7,900	5,980	0.22	0.24
July	1,058.41	1,058.53	0.38	-	5,870	6,730	12,600	0.46	0.53
August	1,058.39	1,058.20	-	-0.33	-5,100	6,080	980	0.04	0.05
September	1,057.93	1,057.61	-	-0.59	-9,420	8,160	-1,260	-0.05	-0.06

Location: Lat. 49° 45' 50", long. 94° 33' 15", Ontario, at Lake Bridge, Keewatin. Gauge: Recording; elevations referred to Geodetic Survey of Canada datum. Period of Record: May 1913 to date. Extremes Recorded: Daily - Maximum, 30 June 1916, 1,063.93 feet, Minimum, 6 March 1925, 1,054.97 feet.

Daily Elevations in Feet for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	60.44	60.19	60.08	59.69	59.39	59.05	58.85	58.49	57.98	57.83	58.48	58.14
2.....	60.47	60.02	60.08	59.67	59.40	59.05	58.85	58.69	58.20	57.85	58.33	58.18
3.....	60.54	60.23	60.06	59.64	59.39	59.07	58.84	58.48	58.17	57.76	58.37	57.88
4.....	60.51	60.31	60.04	59.64	59.35	59.06	58.81	58.59	57.98	57.85	58.49	57.93
5.....	60.50	60.32	60.03	59.65	59.35	59.06	58.77	58.60	57.96	58.01	58.47	57.92
6.....	60.44	60.37	60.02	59.60	59.37	59.06	58.78	58.59	58.22	57.93	58.37	57.89
7.....	60.43	60.00	60.00	59.62	59.35	59.03	58.83	58.52	58.21	57.97	58.26	57.86
8.....	60.27	59.78	60.01	59.58	59.35	-	58.80	58.45	58.02	58.06	58.40	57.99
9.....	60.39	60.04	59.99	59.60	59.34	-	58.80	58.49	58.24	58.04	58.29	57.69
10.....	60.47	60.40	59.93	59.58	59.31	-	58.82	58.48	57.92	58.14	58.28	57.74
11.....	60.51	60.28	59.94	59.55	59.26	58.99	58.78	58.53	58.02	58.13	58.34	57.92
12.....	60.52	60.28	59.92	59.57	59.26	58.98	58.78	58.57	57.98	58.11	58.21	57.69
13.....	60.53	60.18	59.92	59.48	59.25	58.98	58.84	58.64	57.88	58.37	58.34	57.87
14.....	60.52	60.11	59.90	59.50	59.24	58.98	58.87	58.38	57.98	58.38	58.21	57.91
15.....	60.44	60.04	59.91	59.52	59.23	58.98	58.81	58.41	57.97	58.12	58.15	57.94
16.....	60.30	60.06	59.88	59.49	59.24	58.96	58.78	58.43	57.97	58.26	58.22	57.65
17.....	60.35	60.17	59.85	59.47	59.21	58.94	58.76	58.42	58.01	58.44	58.15	57.75
18.....	60.40	60.16	59.87	59.48	59.18	58.95	58.73	58.24	57.97	58.23	58.27	57.85
19.....	60.44	59.98	59.87	59.49	59.17	58.95	58.82	58.17	57.87	58.31	58.07	57.63
20.....	60.47	60.01	59.86	59.50	59.16	58.94	58.74	58.12	57.82	58.40	58.07	57.80
21.....	60.51	60.03	59.86	59.49	59.16	58.92	58.67	58.19	57.92	58.42	57.97	57.80
22.....	60.24	60.19	59.83	59.44	59.17	58.90	58.56	58.07	57.92	58.40	58.07	57.74
23.....	60.15	60.04	59.87	59.45	59.14	58.92	58.57	58.21	57.89	58.40	57.97	57.45
24.....	60.16	60.02	59.83	59.43	59.14	58.89	58.47	58.14	57.73	58.41	57.92	57.47
25.....	60.23	60.12	59.82	59.41	59.14	58.89	58.56	58.16	57.65	58.39	58.14	57.56
26.....	60.35	60.13	59.78	59.42	59.10	58.87	58.67	58.28	57.65	58.38	58.13	57.55
27.....	60.42	60.09	59.75	59.42	59.05	58.87	58.75	57.92	57.84	58.37	58.12	57.51
28.....	60.30	60.15	59.75	59.42	59.06	58.86	58.61	58.12	57.83	58.45	58.00	57.60
29.....	60.37	60.04	59.72	59.41	-	58.85	58.49	58.04	57.78	58.39	58.07	57.42
30.....	60.28	60.09	59.71	59.40	-	58.86	58.58	58.01	57.84	58.38	57.81	57.17
31.....	60.42	-	59.71	59.38	-	58.86	-	57.96	-	58.50	57.84	-

Add 1,000.00 to obtain elevation in feet, Geodetic Survey of Canada datum.

Location: Lat. 49° 46' 15", long. 94° 29' 25", Ontario, at Government Dock. Gauge: Staff; elevations referred to Geodetic Survey of Canada datum. Period of Record: February 1915 to date. Extremes Recorded: Daily - Maximum, 19 July 1916, 1,063.93 feet, Minimum, 9 March 1925, 1,055.04 feet. Remarks: Records of water elevations available upon application to the District Engineer at Winnipeg, for address see page 8.

WINNIPEG RIVER AT MILL "A", KEEWATIN - STATION No. 5PE₁₅

Location: Lat. 49° 45' 50", long. 94° 33' 30", Ontario, on arm of Winnipeg River, known as Darlington Bay. Gauge: Recording; elevations referred to Geodetic Survey of Canada datum. Period of Record: June 1913 to date. Extremes Recorded: Daily - Maximum, 3 August 1950, 1,050.28 feet, Minimum, 10 April 1932, 1,031.05 feet. Remarks: Maximum 9 June 1927, 1,050.78 prior to enlargement of channel at Dalles Rapids during winter 1949-50.

Daily Elevations in Feet for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	37.86	39.10	39.20	39.77	39.48	39.24	39.08	38.79	38.54	37.83	37.66	37.19
2.....	38.09	39.02	39.28	39.83	39.25	39.12	39.09	38.83	37.86	38.12	37.72	37.70
3.....	38.15	38.94	39.38	39.89	39.32	39.16	39.11	38.89	37.95	38.62	37.40	38.61
4.....	38.18	39.04	39.38	39.87	39.41	39.24	39.12	38.36	38.38	38.83	37.10	38.64
5.....	38.19	39.19	39.39	39.77	39.42	39.27	39.11	37.90	38.50	38.91	37.32	38.67
6.....	38.10	39.26	39.48	39.78	39.42	39.31	38.98	38.38	38.46	38.70	37.54	38.83
7.....	38.01	39.33	39.72	39.86	39.42	39.34	39.00	38.70	38.38	38.19	37.44	38.22
8.....	38.19	39.33	39.68	39.86	39.32	39.26	39.08	38.82	37.94	38.33	37.42	37.84
9.....	38.26	39.27	39.80	39.86	39.22	39.17	39.06	38.85	37.46	38.72	37.37	38.38
10.....	38.20	38.75	39.97	39.88	39.29	39.25	38.96	38.85	37.68	38.57	36.98	38.85
11.....	38.20	38.85	39.97	39.88	39.37	39.33	38.97	38.42	38.16	38.45	36.57	39.02
12.....	38.04	39.06	39.98	39.79	39.41	39.36	39.02	38.05	38.17	38.33	36.60	39.13
13.....	37.62	39.18	39.99	39.79	39.43	39.39	38.60	38.45	38.23	38.03	37.06	39.35
14.....	37.55	39.21	39.92	39.88	39.42	39.41	38.18	38.81	38.32	37.69	37.54	38.94
15.....	37.90	39.23	39.78	39.90	39.36	39.33	38.42	38.93	37.89	37.98	37.96	38.46
16.....	38.16	39.22	39.86	39.92	39.32	39.24	38.70	38.96	37.57	38.22	37.96	39.06
17.....	38.20	39.15	39.95	39.92x	39.35	39.30	38.99	38.93	37.83	38.17	37.51	39.64
18.....	38.35	39.12	39.97	39.82x	39.47	39.37	39.03	38.56	38.19	38.40	36.94	39.75
19.....	38.33	39.22	39.98	39.70x	39.50	39.40	39.04	38.14	38.42	38.62	37.38	39.90
20.....	38.25	39.27	39.98	39.83x	39.50	39.40	38.54	38.55	38.59	38.10	37.43	39.87
21.....	38.32	39.27	39.97	39.87x	39.52	39.39	38.16	38.97	38.46	37.68	37.50	39.32
22.....	38.45	39.29	39.83	39.88	39.43	39.38	38.79	39.03	38.04	38.03	37.40	38.71
23.....	38.49	39.31	39.84	39.88	39.32	39.12	38.89	39.10	37.72	38.42	37.37	39.06
24.....	38.51	39.17	39.89	39.88	39.36	39.20	38.92	39.07	38.17	38.08	37.10	39.67
25.....	38.54	39.19	39.75	39.79	39.43	39.30	38.92	38.59	38.59	38.05	37.06	39.77
26.....	38.56	39.29	39.83	39.68	39.42	39.31	38.88	38.16	38.67	38.12	37.34	39.75
27.....	38.70	39.36	39.91	39.75	39.40	39.34	38.30	38.63	38.69	37.66	37.52	39.59
28.....	38.80	39.37	39.93	39.86	39.37	39.35	37.95	38.95	38.54	37.19	37.63	38.87
29.....	38.93	39.40	39.92	39.87	-	39.37	38.49	39.04	38.08	37.38	37.86	38.22
30.....	38.99	39.39	39.93	39.87	-	39.30	38.70	39.09	37.93	37.64	38.06	38.59
31.....	39.06	-	39.89	39.78	-	39.20	-	39.04	-	37.56	37.53	-

Add 1,000.00 to obtain elevation in feet, Geodetic Survey of Canada datum. x - Staff gauge readings.

(Western Outlet, Lake of the Woods, Ontario.)

Location: Lat. 49° 46' 15", long. 94° 31' 25", Ontario, at Power House tailrace. Gauge: Recording; elevations referred to Geodetic Survey of Canada datum. Period of Record: Elevations only October 1913 to date.

Daily Elevations in Feet for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	37.67	38.97	39.06	39.72	39.36	39.20	38.97	38.77	38.05	37.38	37.57	36.96
2.....	37.91	38.87	39.14	39.79	39.07	39.10	38.97	38.75	37.44	37.95	37.59	37.77
3.....	37.95	38.80	39.22	39.88	39.26	39.18	39.02	38.74	37.88	38.43	37.08	38.47
4.....	37.98	38.93	39.23	39.88	39.31	39.24	39.02	38.97	38.25	38.62	36.88	38.35
5.....	37.99	39.03	39.26	39.79	39.34	39.27	39.03	38.66	38.32	38.69	37.18	38.57
6.....	37.80	39.12	39.44	39.83	39.36	39.31	38.85	38.31	38.28	38.35	37.34	38.68
7.....	37.77	39.17	39.64	39.88	39.35	39.33	38.91	38.59	38.19	37.85	37.27	37.81
8.....	37.99	39.17	39.62	39.88	39.24	39.17	38.99	38.68	37.64	38.18	37.26	37.62
9.....	38.02	39.13	39.74	39.89	39.13	39.09	38.95	38.72	37.18	38.42	37.30	38.44
10.....	37.97	38.56	39.89	39.92	39.23	39.18	38.87	38.72	37.63	38.21	36.78	38.75
11.....	37.98	38.77	39.91	39.84	39.32	39.28	38.88	38.14	38.04	38.09	36.53	38.87
12.....	37.68	38.97	39.92	39.73	39.36	39.32	38.89	37.86	38.03	37.88	37.10	39.02
13.....	37.28	39.09	39.95	39.74	39.36	39.35	38.33	38.43	38.14	37.65	37.36	39.17
14.....	37.27	39.10	39.87	39.81	39.37	39.36	38.00	38.76	38.10	37.44	38.04	38.55
15.....	37.71	39.10	39.76	39.83	39.29	39.28	38.39	38.84	37.50	37.88	37.96	38.27
16.....	37.94	39.08	39.86	39.85	39.22	39.19	38.67	38.86	37.34	37.80	37.94	39.06
17.....	38.00	38.99	39.94	39.85	39.34	39.25	38.93	38.78	37.69	37.87	37.75	39.44
18.....	38.10	38.99	39.96	39.72	39.44	39.33	38.99	38.19	37.98	38.15	37.31	39.61
19.....	38.08	39.08	39.97	39.63	39.46	39.34	38.94	37.93	38.21	38.35	37.39	39.76
20.....	38.04	39.12	39.97	39.74	39.46	39.35	37.95	38.53	38.23	37.66	37.42	39.67
21.....	38.13	39.13	39.97	39.80	39.49	39.35	38.04	38.87	38.17	37.40	37.61	38.89
22.....	38.23	39.11	39.85	39.82	39.34	39.33	38.71	38.90	37.71	37.89	37.59	38.45
23.....	38.28	39.16	39.87	39.84	39.21	39.11	38.74	38.99	37.42	38.12	37.29	38.94
24.....	38.36	39.01	39.89	39.83	39.29	39.17	38.78	38.91	38.00	37.72	36.95	39.46
25.....	38.33	39.06	39.76	39.70	39.34	39.24	38.79	38.25	38.37	37.77	37.00	39.54
26.....	38.43	39.16	39.84	39.61	39.33	39.26	38.70	37.97	38.43	37.83	37.27	39.56
27.....	38.55	39.20	39.92	39.71	39.33	39.28	38.02	38.69	38.46	37.39	37.33	39.36
28.....	38.65	39.23	39.93	39.78	39.30	39.30	37.75	38.84	38.33	36.98	37.48	38.42
29.....	38.78	39.26	39.88	39.80	-	39.31	38.48	38.93	37.53	37.26	37.75	38.00
30.....	38.85	39.20	39.89	39.80	-	39.21	38.60	38.98	37.65	37.47	37.93	38.47
31.....	38.93	-	39.85	39.67	-	39.07	-	38.87	-	37.47	37.17	-

Add 1,000.00 to obtain elevation in feet, Geodetic Survey of Canada datum.

Location: Lat. 49° 46' 20", long. 94° 30' 10", Ontario, at Power House tailrace. Gauge: Staff; elevations referred to Geodetic Survey of Canada datum. Period of Record: Elevations only August 1907 to date.

Daily Elevations in Feet for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	40.00	40.26	40.20	40.40	40.35	40.26	40.20	40.10	39.92	38.66	38.70	38.85
2.....	40.02	40.23	40.20	40.40	40.15	40.20	40.22	40.12	39.22	38.98	38.60	39.00
3.....	40.00	40.23	40.21	40.40	40.30	40.21	40.22	40.13	39.03	39.32	39.00	39.08
4.....	40.09	40.26	40.25	40.40	40.24	40.26	40.20	40.03	39.03	39.43	38.91	38.95
5.....	40.10	40.26	40.25	40.36	40.25	40.24	40.22	39.98	39.27	39.25	38.72	39.00
6.....	40.11	40.25	40.25	40.38	40.23	40.25	40.19	40.02	39.08	39.16	38.23	39.08
7.....	40.10	40.23	40.33	40.40	40.22	40.24	40.16	40.08	39.20	38.95	38.47	39.03
8.....	40.10	40.21	40.21	40.40	40.23	40.24	40.15	40.07	38.71	38.95	38.43	39.03
9.....	40.07	40.22	40.36	40.35	40.22	40.22	40.20	40.10	38.70	39.18	38.35	38.90
10.....	40.00	40.01	40.43	40.32	40.20	40.17	40.14	40.10	38.68	39.05	38.28	39.07
11.....	40.02	40.09	40.45	40.43	40.20	40.25	40.17	40.05	38.83	38.84	38.33	39.21
12.....	39.01	40.22	40.45	40.40	40.20	40.27	40.20	40.00	38.56	38.93	38.67	39.33
13.....	38.70	40.22	40.47	40.38	40.24	40.30	40.12	39.93	39.00	38.86	38.26	39.45
14.....	39.13	40.21	40.45	40.41	40.30	40.30	40.02	40.03	39.70	38.76	38.85	39.37
15.....	40.11	40.20	40.42	40.40	40.25	40.30	40.06	39.96	38.87	38.83	39.04	39.12
16.....	40.08	40.22	40.42	40.42	40.27	40.25	40.05	40.01	38.73	38.95	39.05	39.48
17.....	40.05	40.19	40.43	40.43	40.29	40.26	40.16	40.16	38.38	38.99	38.80	39.77
18.....	40.10	40.11	40.45	40.40	40.34	40.25	40.15	40.06	38.88	38.95	38.80	39.82
19.....	40.13	40.20	40.49	40.37	40.33	40.25	40.20	40.00	39.34	39.05	38.58	39.97
20.....	40.12	40.21	40.47	40.37	40.31	40.29	40.11	40.06	39.20	39.05	38.65	40.00
21.....	40.14	40.26	40.46	40.39	40.33	40.30	40.03	40.15	38.87	39.05	38.60	39.68
22.....	40.07	40.26	40.42	40.42	40.31	40.30	40.06	40.11	38.60	38.90	38.53	39.35
23.....	40.14	40.24	40.33	40.38	40.30	40.23	40.11	40.20	38.82	38.87	38.73	39.30
24.....	40.19	40.23	40.41	40.40	40.29	40.20	40.11	40.16	38.85	38.71	38.57	39.83
25.....	40.18	40.13	40.36	40.40	40.30	40.26	40.13	40.06	39.25	38.92	38.66	39.82
26.....	40.18	40.21	40.36	40.36	40.28	40.21	40.10	39.99	39.23	38.83	38.73	39.83
27.....	40.20	40.23	40.40	40.38	40.25	40.27	40.06	40.01	39.22	38.37	38.52	39.66
28.....	40.13	40.21	40.45	40.41	40.28	40.30	40.01	40.08	39.02	38.70	38.65	39.37
29.....	40.23	40.23	40.41	40.41	-	40.30	40.06	40.09	38.72	38.81	38.76	39.15
30.....	40.25	40.20	40.45	40.38	-	40.27	40.06	40.08	38.97	38.58	38.86	38.90
31.....	40.27	-	40.43	40.40	-	40.24	-	40.05	-	38.76	38.77	-

Add 1,000.00 to obtain elevation in feet, Geodetic Survey of Canada datum.

ENGLISH RIVER AT UMFREVILLE - STATION No. 5QA₂

Location: Lat. 49° 52' 30", long. 91° 27' 30", Ontario, on Jarvis Lake at water tank, one quarter mile east of Canadian National Railways Station. Drainage Area: 2,465 square miles. Gauge: Staff; elevations referred to Geodetic Survey of Canada datum, 1923 adjustment. Measurement of Discharge: From boat or bridge at outlet of Jarvis Lake, three miles downstream from gauge. Period of Record: September 1921 to date. Average Discharge: (37 years) - 1,880 cfs. Extremes Recorded: Daily - Maximum, 11 October 1941, 15,700 cfs, Minimum, 13 November 1940, 65 cfs. Remarks: Records good during open-water periods; fair during ice periods.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	945	1,270	1,650	1,550	1,090	996	1,020	2,900	2,550	2,020	2,750	1,600
2.....	953	1,270	1,640	1,530	1,100	987	1,020	2,970	2,540	2,150	2,730	1,580
3.....	962	1,300	1,630	1,520	1,100	987	1,030	3,080	2,530	2,210	2,700	1,570
4.....	970	1,330	1,630	1,500	1,100	978	1,030	3,110	2,530	2,190	2,620	1,570
5.....	978	1,340	1,630	1,490	1,090	978	1,040	3,150	2,540	2,210	2,560	1,560
6.....	978	1,370	1,630	1,480	1,090	970	1,040	3,190	2,530	2,230	2,520	1,550
7.....	978	1,380	1,630	1,470	1,080	970	1,050	3,220	2,520	2,270	2,460	1,540
8.....	987	1,380	1,630	1,460	1,080	962	1,060	3,250	2,500	2,330	2,380	1,530
9.....	996	1,390	1,630	1,440	1,070	962	1,060	3,280	2,490	2,430	2,320	1,530
10.....	1,000	1,390	1,650	1,430	1,060	962	1,080	3,290	2,490	2,540	2,280	1,530
11.....	1,010	1,390	1,640	1,420	1,060	962	1,110	3,300	2,470	2,560	2,230	1,520
12.....	1,020	1,400	1,640	1,420	1,060	953	1,160	3,290	2,460	2,620	2,190	1,520
13.....	1,030	1,400	1,630	1,410	1,060	953	1,210	3,260	2,450	2,660	2,140	1,510
14.....	1,040	1,400	1,630	1,390	1,060	962	1,300	3,210	2,440	2,700	2,080	1,510
15.....	1,060	1,410	1,620	1,370	1,050	970	1,360	3,160	2,430	2,740	2,060	1,510
16.....	1,070	1,420	1,620	1,330	1,050	970	1,480	3,140	2,410	2,800	2,020	1,520
17.....	1,090	1,430	1,620	1,310	1,040	978	1,590	3,100	2,400	2,860	1,990	1,520
18.....	1,110	1,430	1,610	1,280	1,040	978	1,690	3,080	2,380	2,920	1,950	1,530
19.....	1,140	1,440	1,610	1,260	1,040	978b	1,810	3,040	2,370	2,990	1,920	1,550
20.....	1,150	1,450	1,610	1,240	1,040	978	1,910	2,970	2,360	3,020	1,870	1,580
21.....	1,170	1,450	1,600	1,210	1,040	978	2,020	2,920	2,340	3,030	1,830	1,610
22.....	1,180	1,460	1,600	1,180	1,040	978	2,120	2,860	2,310	3,040	1,790	1,660
23.....	1,190	1,470	1,590	1,170	1,040	970	2,260	2,800	2,200	3,040	1,750	1,710
24.....	1,200	1,480	1,590	1,150	1,020	970	2,350	2,730	2,160	3,020	1,720	1,760
25.....	1,220	1,490	1,590	1,140	1,000	978	2,460	2,680	2,120	2,980	1,710	1,810
26.....	1,230	1,510	1,580	1,140	1,000	978	2,600	2,680	2,080	2,930	1,690	1,850
27.....	1,240	1,560	1,570b	1,140	996	987	2,690	2,670	2,070	2,900	1,670	1,890
28.....	1,240	1,580	1,570	1,140	996	987	2,720	2,610	2,050	2,870	1,640	1,940
29.....	1,250	1,610	1,560	1,130	-	996	2,760	2,570	2,030	2,840	1,630	1,980
30.....	1,270	1,630	1,560	1,120	-	1,000	2,840	2,560	2,010	2,800	1,620	2,070
31.....	1,280	-	1,560	1,110	-	1,000	-	2,560	-	2,780	1,610	-
Mean	1,090	1,430	1,610	1,320	1,050	976	1,660	2,990	2,360	2,670	2,080	1,640
Per sq. mi.	0.44	0.58	0.65	0.54	0.43	0.40	0.67	1.21	0.96	1.08	0.84	0.67
Acre-feet	67,310	84,950	99,070	81,180	58,500	60,010	98,920	183,700	140,400	164,000	127,800	97,410

The Year.....Discharge: Daily - Maximum 11 May, 3,300 (elevation 1,294.61)
 - Minimum 1 October, 945 (elevation 1,292.37)
 Mean 1,740; Per Square Mile 0.71
 Runoff: Acre-feet 1,263,000; Depth in inches on drainage area 9.62

b - Ice conditions 27 December to 19 March.

Location: Lat. 50° 04' 15", long. 91° 56' 40", Ontario, at narrows between Pelican and Abram Lakes, two and one-half miles southwest of Sioux Lookout. Drainage Area: 5,240 square miles. Gauge: Wire-weight; elevations referred to Geodetic Survey of Canada datum, 1923 adjustment. Measurement of Discharge: From bridge. Period of Record: February 1921 to date. Prior to November 1956 when this station was relocated, records were obtained about two miles downstream from the present site. Average Discharge: (37 years) 4,210 cfs. Extremes Recorded: Daily - Maximum, 7 June 1954, 25,100 cfs (elevation 1,176.99 ft.), Minimum, December 1940 and January 1941, 650 cfs. Remarks: Records good.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	1,870	2,010	2,280	2,440	2,300	2,060	1,860	3,460	4,760	4,700	5,350	3,660
2.....	1,880	2,030	2,300	2,440	2,300	2,040	1,860	3,580	4,720	4,700	5,320	3,600
3.....	1,910	2,020	2,310	2,430	2,280	2,030	1,860	3,770	4,700	4,700	5,300	3,580
4.....	1,880	2,010	2,310	2,430	2,270	2,030	1,860	3,890	4,700	4,740	5,280	3,560
5.....	1,860	2,010	2,320	2,420	2,260	2,020	1,860	3,990	4,850	4,760	5,250	3,530
6.....	1,820	2,020	2,320	2,420	2,240	2,010	1,860	4,090	4,900	4,830	5,230	3,490
7.....	1,780	2,030	2,330	2,420	2,240	2,010	1,860	4,190	4,970	4,830	5,200	3,470
8.....	1,740	2,030	2,330	2,400	2,230e	2,000	1,860	4,320	5,010	4,810	5,160	3,420
9.....	1,750	2,020	2,350	2,400	2,220	1,990	1,870	4,400	5,040	4,830	5,080	3,390
10.....	1,790	2,020	2,350	2,400	2,210	1,980	1,880	4,480	5,060	4,830	5,010	3,340
11.....	1,860	2,020	2,300	2,400	2,210	1,970	1,890	4,570	5,060	4,850	4,970	3,280
12.....	1,870	2,030	2,320	2,390	2,190	1,960	1,900	4,650	5,040	4,880	4,900	3,250
13.....	1,890	2,040	2,350	2,390	2,180	1,970	1,910	4,700	5,060	4,880	4,830	3,220
14.....	1,890	2,040	2,360	2,370	2,170	1,970	1,930	4,740e	5,060	4,920	4,760	3,220
15.....	1,870	2,070	2,360	2,360	2,160	1,960	1,970	4,790	5,040	4,940	4,680	3,200
16.....	1,790	2,080	2,390	2,360	2,150	1,960	2,040	4,850	5,010	4,970	4,590	3,190
17.....	1,830	2,090	2,390	2,350	2,130	1,960	2,130	4,900	4,970	4,990	4,500	3,170
18.....	1,880	2,090	2,400	2,350	2,130	1,960	2,180	4,910e	4,940	5,060	4,420	3,140
19.....	1,880	2,100e	2,400	2,360	2,120	1,960	2,240	4,920	4,920	5,080	4,340	3,090
20.....	1,930	2,110	2,420	2,350	2,120	1,950	2,300	4,920	4,900	5,110	4,270	3,060
21.....	1,960	2,120	2,430	2,350	2,110	1,940	2,330	4,970	4,830	5,110	4,170	3,030
22.....	1,880	2,120	2,430	2,330	2,100	1,930	2,400	4,990	4,790	5,130	4,070	2,990
23.....	1,950	2,130	2,460	2,320	2,090	1,920	2,510	4,970	4,760	5,130	3,990	2,980
24.....	1,930	2,160	2,470	2,310	2,080	1,910	2,670	4,940	4,720	5,130	4,010	3,030
25.....	1,960	2,160	2,460	2,300	2,080	1,900	2,780	4,920	4,700	5,200	3,950	3,090
26.....	1,980	2,180	2,460	2,270	2,070	1,890	2,860	4,920	4,680	5,250	3,890	3,120
27.....	1,990	2,210	2,460	2,270	2,070	1,890	2,960	4,900	4,650	5,280	3,850	3,140
28.....	1,910	2,240	2,460	2,280	2,060	1,880	3,060e	4,880	4,610	5,300	3,790	3,150
29.....	1,950	2,270	2,460	2,300	-	1,870	3,170	4,850	4,680	5,300	3,790	3,170
30.....	1,920	2,280	2,460	2,310	-	1,870	3,320	4,830	4,680	5,320	3,790	3,220
31.....	2,010	-	2,440	2,310	-	1,860	-	4,790	-	5,350	3,730	-
Mean	1,880	2,090	2,380	2,360	2,170	1,960	2,240	4,580	4,860	5,000	4,560	3,260
Per sq. mi.	0.36	0.40	0.45	0.45	0.41	0.37	0.43	0.87	0.93	0.95	0.87	0.62
Acre-feet	115,900	124,400	146,500	145,200	120,500	120,300	133,200	281,800	289,200	307,300	280,600	193,900

The Year..... Discharge: Daily - Maximum 31 July and 1 August 5,350 (elevation 1,172.02)
 - Minimum 8 October 1,740 (elevation 1,170.38)
 Mean 3,110; Per Square Mile 0.59

Runoff: Acre-feet 2,259,000; Depth in inches on drainage area 8.08

e - Estimated.

LAKE ST. JOSEPH DIVERSION AT ROOT PORTAGE - STATION No. 5QB₆

Location: Lat. 50° 52' 10", long. 91° 27' 30", Ontario, at control dam. Gauge: Recording. Measurement of Discharge: From boat. Period of Record: September 1957 to date. Extremes Recorded: Daily - Maximum, 2 November 1957, 5,170 cfs, Minimum, 23 March 1958, 584 cfs. Remarks: Records supplied by Hydro-Electric Power Commission of Ontario. The following discharges were recorded in September 1957: 20 September, 4,250 cfs; 21 September, 5,160 cfs; 22 September, 4,960 cfs; 23 September, 1,460 cfs. See Albany River at Outlet of Lake St. Joseph, Station No. 4GA₁, for additional outflow records from Lake St. Joseph.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	0	4,930	3,830	2,960	786	630	2,070	2,380	3,060	3,320	3,480	3,690
2.....	0	5,170	3,780	2,940	760	620	2,060	2,450	3,060	3,410	3,550	3,650
3.....	0	4,970	3,750	2,900	755	604	2,090	2,460	3,060	3,400	3,540	3,610
4.....	0	4,780	3,710	2,870	740	608	2,100	2,490	3,100	3,430	3,550	3,550
5.....	0	4,730	3,680	2,840	745	615	2,100	2,500	3,160	3,430	3,440	3,700
6.....	0	4,610	3,620	2,820	704	604	2,060	2,520	3,050	3,400	3,470	3,660
7.....	0	4,790	3,590	2,770	699	620	2,000	2,560	3,040	3,360	3,570	3,630
8.....	0	4,790	3,540	2,750	699	625	1,980	2,600	3,160	3,320	3,550	3,610
9.....	0	4,520	3,540	2,720	679	604	1,980	2,620	3,160	3,350	3,550	3,630
10.....	0	4,420	3,930	2,690	662	599	1,960	2,620	3,140	3,340	3,550	3,650
11.....	0	4,440	3,790	2,660	650	594	1,950	2,640	3,100	3,390	3,530	3,600
12.....	0	4,370	3,470	2,630	662	594	1,940	2,670	3,060	3,380	3,490	3,610
13.....	0	4,330	3,390	2,600	655	599	1,900	2,610	3,170	3,390	3,480	3,630
14.....	0	4,400	3,350	2,560	655	594	1,890	2,630	3,140	3,320	3,500	3,610
15.....	0	4,350	3,350	2,540	635	620	1,930	2,640	3,210	3,460	3,460	3,600
16.....	0	4,240	3,280	2,500	620	615	1,990	2,700	3,190	3,400	3,810	3,710
17.....	0	4,140	3,260	2,480	640	615	2,020	2,680	3,190	3,390	3,860	3,610
18.....	0	4,110	3,210	2,450	615	604	2,100	2,610	3,170	3,410	3,830	3,570
19.....	0	4,110	3,160	2,330	608	608	2,130	2,600	3,170	3,460	3,800	3,550
20.....	0	3,990	3,160	1,930	608	608	2,150	2,700	3,140	3,460	3,790	3,550
21.....	0	3,980	3,100	1,440	615	594	2,180	2,760	3,160	3,400	3,760	3,480
22.....	0	3,930	3,080	979	615	604	2,220	2,800	3,180	3,510	3,780	3,540
23.....	0	3,910	3,060	819	620	584	2,240	2,820	3,160	3,530	3,850	3,610
24.....	0	3,860	3,120	811	631	933	2,260	2,910	3,240	3,510	3,790	3,700
25.....	2,160	3,820	2,970	796	630	1,720	2,260	2,780	3,320	3,540	3,720	3,570
26.....	3,980	3,780	2,960	791	630	2,110	2,280	2,340	3,290	3,550	3,730	3,690
27.....	3,910	3,750	2,950	786	630	2,070	2,270	2,000	3,240	3,580	3,720	3,640
28.....	3,940	3,690	2,910	774	635	2,040	2,370	3,010	3,310	3,520	3,720	3,660
29.....	3,780	3,660	3,030	786	-	2,050	2,350	3,070	3,350	3,510	3,800	3,800
30.....	4,000	3,670	3,030	774	-	2,140	2,380	3,100	3,300	3,510	3,880	3,760
31.....	4,290	-	3,000	760	-	2,110	-	3,160	-	3,470	3,720	-
Mean	841	4,270	3,340	2,010	664	940	2,110	2,630	3,170	3,430	3,650	3,630
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	51,690	254,400	205,500	123,900	36,860	57,790	125,400	161,500	188,600	211,100	224,700	215,900

The Year..... Discharge: Daily - Maximum 2 November 5,170
 - Minimum for period of continuous diversion, 23 March, 584

Mean 2,560

Runoff: Acre-feet 1,857,000

Location: Lat. 51° 11' 52", long. 90° 13' 20", Ontario, at Rat Rapids. Gauge: Staff. Period of Record: October 1957 to date. Extremes Recorded: Daily - Maximum, 1 and 2 October 1957, 1,860 cfs, Minimum, at various times, 0 cfs. Remarks: Records supplied by the Hydro-Electric Power Commission of Ontario. See Lake St. Joseph Diversion at Root Portage, Station No. 5QB₆, for additional outflow records from Lake St. Joseph.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	1,860	1,400	1,170	805	575	585	605	0	0	0	0	0
2.....	1,860	1,400	1,210	805	575	585	605	0	0	0	0	0
3.....	1,430	1,350	1,210	915	575	585	605	0	0	0	0	0
4.....	1,360	1,350	1,210	805	575	585	605	0	0	0	0	0
5.....	1,210	1,350	1,210	805	575	585	605	0	0	0	0	0
6.....	1,300	1,350	1,210	805	575	585	605	0	0	0	0	0
7.....	1,310	1,270	1,210	805	575	585	605	0	0	0	0	0
8.....	1,310	1,270	1,210	805	575	585	605	0	0	0	0	0
9.....	1,320	1,270	1,210	805	575	585	605	0	0	0	0	0
10.....	1,430	1,270	1,260	805	575	585	605	0	0	0	0	0
11.....	1,430	1,270	1,260	805	575	605	605	0	0	0	0	0
12.....	1,400	1,220	1,260	805	575	605	605	0	0	0	0	0
13.....	1,270	1,220	1,260	805	575	605	605	0	0	0	0	0
14.....	1,270	1,220	1,260	805	575	605	605	0	0	0	0	0
15.....	1,290	1,220	940	805	575	605	965	0	0	0	0	0
16.....	1,370	1,220	940	595	575	605	605	0	0	0	0	204
17.....	1,250	1,220	940	595	575	605	605	0	0	0	0	0
18.....	1,250	1,230	940	595	595	605	15	0	0	0	0	0
19.....	1,250	1,230	905	595	595	605	15	0	0	0	0	0
20.....	1,250	1,230	865	595	595	605	15	0	0	0	0	0
21.....	1,270	1,200	865	595	595	605	0	0	0	0	0	0
22.....	1,270	1,200	865	595	595	605	0	0	0	0	0	0
23.....	1,270	1,200	865	595	595	605	0	0	0	0	0	0
24.....	1,270	1,200	865	595	595	605	0	0	0	0	0	0
25.....	1,270	1,150	865	595	585	605	0	0	0	0	0	0
26.....	1,270	1,150	865	595	585	605	0	0	0	0	0	0
27.....	1,350	1,190	805	595	585	605	0	0	0	920	0	0
28.....	1,350	1,190	805	595	585	605	0	0	0	0	0	0
29.....	1,400	1,170	805	595	-	605	0	0	0	0	0	0
30.....	1,400	1,170	805	575	-	605	0	0	0	0	0	0
31.....	1,400	-	805	575	-	605	-	0	-	0	0	-
Mean	1,353	1,246	1,020	699	581	599	356	0	0	29.7	0	6.8
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	-	-	-	-	-	-	-	-	-	-

The Year.....Discharge: Daily - Maximum 1 and 2 October 1957, 1,860

- Minimum at various times 0

Mean 492

Runoff: Acre-feet 356,100

STORAGE, OUTFLOW AND INFLOW

Supply factors of LacSeul, as set forth in the following tables, have been compiled by the Lake of the Woods Control Board from records secured by the Water Resources Branch and by the Hydro-Electric Power Commission of Ontario. Records available: September 1914 to date. Deduced records January 1907 to September 1914. Storage: Lac Seul area, including Lost Lake (revised) 441 square miles at elevation 1,159 and 575 square miles at elevation 1,172. Daily elevations at Hudson, Lost Lake, are corrected graphically for wind effect and are used as a basis for determining changes in storage. Outflow: Daily records of total outflow compiled from discharges through the power-house and sluices at dam, Lower Ear Falls, two miles below outlet of lake. Inflow: Ten-day and monthly-mean inflows computed from mean outflow with the addition or subtraction of flow equivalent to recorded change in storage. Regulation: Lake levels and outflow regulated by operation of power-house dam at Lower Ear Falls, through the co-operation of the Lake of the Woods Control Board and the Hydro-Electric Power Commission of Ontario.

Mean Daily Outflow in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	7,620	7,770	8,060	9,120	9,380	8,940	14,500	10,700	8,650	7,760	4,390	4,050
2.....	7,580	9,330	7,760	9,080	9,070	9,030	14,700	9,680	8,370	8,220	4,370	4,800
3.....	7,580	8,390	8,850	9,100	9,120	8,980	14,800	9,450	8,110	8,180	4,340	5,580
4.....	7,590	8,700	9,260	9,100	9,140	8,880	15,000	9,540	8,790	6,780	4,750	5,700
5.....	7,520	8,680	9,510	8,990	9,150	8,960	15,000	9,440	8,810	5,460	4,340	5,660
6.....	6,100	8,760	9,460	8,890	9,240	9,000	14,800	9,580	8,870	6,350	4,690	5,700
7.....	6,720	8,840	9,520	9,100	9,090	8,960	14,800	8,980	8,770	6,320	4,660	5,720
8.....	7,430	8,950	8,830	9,140	9,130	9,320	14,600	9,760	8,200	5,840	4,620	5,660
9.....	7,550	8,790	9,310	8,980	9,140	8,380	14,900	12,300	8,450	5,640	4,620	5,870
10.....	7,310	8,910	9,230	9,140	9,220	8,800	14,800	13,300	8,840	4,780	4,630	5,900
11.....	7,540	8,940	9,120	9,040	9,160	8,810	14,800	13,200	8,720	4,780	4,630	5,860
12.....	7,650	8,650	9,530	8,510	9,200	8,700	15,300	13,400	8,580	4,830	5,140	6,160
13.....	6,040	8,880	9,250	8,890	9,250	8,960	15,000	13,300	8,720	4,380	4,860	7,020
14.....	7,510	8,930	9,430	8,930	9,210	9,060	15,000	13,100	8,720	4,370	4,800	6,940
15.....	7,530	9,230	9,150	8,880	9,000	9,050	14,900	13,200	8,670	3,880	4,040	6,880
16.....	7,520	9,100	9,450	8,950	9,100	8,790	14,800	13,800	8,400	4,000	3,360	6,920
17.....	7,810	9,070	9,100	8,920	9,240	8,930	14,700	14,600	8,490	3,780	3,510	7,440
18.....	7,820	9,190	9,030	9,100	9,220	8,830	14,800	13,900	8,600	4,060	4,280	7,440
19.....	7,440	9,650	9,000	8,820	9,120	8,910	14,700	13,700	8,390	4,060	4,690	7,260
20.....	7,610	8,570	9,020	8,940	9,200	8,760	14,700	13,800	8,400	4,110	4,810	7,330
21.....	7,390	9,030	9,100	8,770	9,160	9,440	14,600	14,100	8,870	4,280	4,500	7,220
22.....	7,560	9,380	9,220	9,680	8,780	9,460	15,400	14,000	8,630	4,190	4,920	7,080
23.....	7,660	8,740	8,980	9,280	8,900	9,460	15,300	13,900	7,510	4,310	5,910	7,450
24.....	7,550	8,980	9,190	9,520	8,840	10,600	15,200	10,900	8,710	4,540	5,600	6,880
25.....	7,630	8,330	9,100	9,460	8,800	13,500	15,300	7,550	8,570	4,310	5,600	6,990
26.....	4,930	9,060	9,160	8,080	8,550	14,900	15,300	7,540	8,210	4,070	5,290	6,370
27.....	5,860	9,000	9,140	9,480	8,680	14,900	15,300	7,240	8,810	3,030	4,160	3,700
28.....	7,470	9,090	9,090	9,160	8,840	14,400	15,000	7,580	8,610	3,330	4,940	4,420
29.....	7,800	9,100	8,760	9,380	-	14,900	14,600	7,780	8,820	3,480	5,580	4,160
30.....	7,490	9,140	9,320	9,120	-	13,000	13,500	8,020	8,930	3,780	5,060	4,100
31.....	7,590	-	9,030	9,130	-	14,800	-	8,620	-	4,370	5,270	-
Mean	7,300	8,910	9,100	9,060	9,070	10,200	14,900	11,200	8,570	4,880	4,720	6,080

Summary of Lake Levels, Outflow and Inflow for Water Year 1957-58

Drainage Area - 10,220 square miles							
Date	Mean Lake Level for Month in Feet	Lake Level 1st of Following Month in Feet	Change in Level		Equivalent Storage cfs	Controlled Outflow cfs	Inflow cfs
			Rise Feet	Fall Feet			
October.....	1,169.13	1,168.73	-	-0.91	-5,150	7,300	2,150
November.....	1,168.55	1,168.30	-	-0.43	-2,480	8,910	6,430
December.....	1,168.05	1,167.77	-	-0.53	-2,930	9,100	6,170
January.....	1,167.40	1,166.98	-	-0.79	-4,320	9,060	4,740
February.....	1,166.48	1,166.00	-	-0.98	-5,810	9,070	3,260
March.....	1,165.41	1,164.57	-	-1.43	-7,440	10,200	2,760
April.....	1,163.88	1,163.48	-	-1.09	-5,710	14,900	9,190
May.....	1,163.55	1,163.49	0.01	-	50	11,200	11,250
June.....	1,163.63	1,163.73	0.24	-	1,240	8,570	9,810
July.....	1,164.28	1,164.94	1.21	-	6,160	4,880	11,040
August.....	1,165.22	1,165.40	0.46	-	2,400	4,720	7,120
September.....	1,165.50	1,165.91	0.51	-	2,760	6,080	8,840

Lake St. Joseph Diversion in operation 25 October to 30 September, additional drainage area approximately 4,760 square miles.

Location: Lat. 50° 05' 30", long. 92° 10' 00", Ontario, at Federal Government Dock. Gauge: Recording; elevations referred to Geodetic Survey of Canada datum, adjustment previous to 1923. Period of Record: February 1921 to date. Extremes Recorded: Daily - Maximum, 19 to 26 October 1941, 1,173.05 feet, Minimum, 14 and 15 April 1923, 1,154.97 feet.

Daily Elevations in Feet for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	69.64	68.73	68.30	67.77x	66.96	65.96	64.52	63.48x	63.49	63.68	64.92	65.40
2.....	69.57	68.74	68.29	67.75x	66.93	65.92	64.45	63.48	63.47	63.71	64.97	65.36
3.....	69.48	68.71	68.28	67.71x	66.89	65.86	64.40	63.48	63.47	63.74	65.02	65.42
4.....	69.45	68.72	68.26	67.68x	66.85x	65.83	64.34	63.54	63.53	63.75	65.03	65.46
5.....	69.43	68.70	68.22	67.64	66.82	65.79	64.29	63.54	63.62	63.77	65.04	65.45
6.....	69.42	68.66	68.20	67.66	66.79	65.77	64.24	63.55	63.61	63.82	65.10	65.44
7.....	69.43	68.69	68.20	67.62	66.75	65.71	64.15	63.56	63.61	63.87	65.13	65.49
8.....	69.48	68.80	68.18	67.59	66.72	65.68	64.09	63.62	63.61	63.90	65.12	65.49
9.....	69.44	68.73	68.16	67.55	66.68	65.65	64.02	63.64	63.60	63.91	65.14	65.54
10.....	69.37	68.58	68.16	67.57	66.65	65.60	63.96	63.65	63.68	63.95	65.15	65.53
11.....	69.29	68.57	68.15	67.52	66.61	65.56	63.91	63.64	63.70	63.97	65.17	65.44
12.....	69.26	68.54	68.11x	67.48	66.61	65.53	63.85	63.62	63.71	64.00	65.23	65.46
13.....	69.20	68.56	68.10	67.49	66.54	65.51	63.79	63.60	63.72	64.01	65.24	65.43
14.....	69.17	68.56	68.09	67.47	66.50	65.48	63.75	63.58	63.69	64.05	65.26	65.43
15.....	69.15	68.61	68.06	67.42	66.45	65.44	63.72	63.62	63.67	64.17	65.27	65.45
16.....	69.22	68.60	68.06	67.40	66.42	65.42	63.70	63.63	63.65	64.19	65.29	65.48
17.....	69.19	68.56	68.02	67.40	66.38	65.39	63.70	63.60	63.63	64.21	65.30	65.43
18.....	69.12	68.52	68.00	67.37	66.35x	65.35	63.70	63.61	63.61	64.35	65.26	65.39
19.....	69.08	68.54x	68.00	67.35	66.32	65.30	63.64	63.60	63.62	64.40	65.28	65.40
20.....	69.02	68.56	67.98	67.32x	66.26	65.27	63.62	63.62	63.63	64.38	65.31	65.38
21.....	68.96	68.53	67.99	67.27x	66.24	65.24	63.60	63.59	63.62	64.40	65.34	65.40
22.....	69.01	68.55	67.96	67.27x	66.19	65.19	63.61	63.57	63.59	64.43	65.32	65.42
23.....	68.93	68.46	67.95	67.23x	66.15	65.14	63.59	63.51	63.58	64.47	65.33	65.45
24.....	68.93	68.54	67.93	67.18x	66.13	65.09	63.57	63.45	63.61	64.57	65.36	65.56
25.....	68.87	68.39	67.90	67.16x	66.08	65.04	63.55	63.44	63.64	64.66	65.33	65.63
26.....	68.81	68.34	67.90	67.15	66.05	64.97	63.47	63.43	63.69	64.70	65.31	65.65
27.....	68.77	68.39	67.88	67.12	66.06	64.89	63.39	63.44	63.67	64.75	65.30	65.66
28.....	68.78	68.36	67.87	67.10	66.02	64.81	63.40	63.46	63.64	64.77	65.35	65.67
29.....	68.73	68.38	67.86	67.07	-	64.75	63.48	63.46	63.67	64.85	65.36	65.75
30.....	68.79	68.32	67.83x	67.04	-	64.67	63.46	63.47x	63.67	64.91	65.43	65.99
31.....	68.70	-	67.80x	67.02	-	64.60	-	63.51	-	64.90	65.47	-

Add 1,100.00 to obtain elevation in feet, Geodetic Survey of Canada datum, adjustment previous to 1923.
 x - Staff gauge readings 19 November to 12 December, 4 to 18 February, 1 to 30 May and as indicated.

Location: Lat. 50° 38' 20", long. 93° 10' 30", Ontario, at wharf immediately upstream from Forestry Dock. Gauge: Staff; elevations referred to Geodetic Survey of Canada datum, 1923 adjustment. Period of Record: November 1917 to September 1935 and May 1952 to date. Extremes Recorded: Daily - Maximum, 9 August 1954, 1,171.20 feet, Minimum, 22 April 1923, 1,154.12 feet.

Daily Elevations in Feet for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	69.50	68.65	-	67.70	66.90	65.90	64.49	62.92	63.03	63.35	64.55	65.25
2.....	69.57	68.68	-	67.69	66.87	65.87	64.39	63.21	63.15	63.37	64.58	65.48
3.....	69.53	68.68	-	67.69	66.87	65.85	64.33	62.92	63.13	63.40	64.58	65.20
4.....	69.50	68.62	-	67.69	66.79	65.82	64.27	63.23	63.19	63.47	64.68	65.22
5.....	69.45	68.66	-	67.65	66.76	65.81	64.20	63.20	63.00	63.60	64.65	65.22
6.....	69.47	68.59	-	67.54	66.71	65.79	64.10	63.25	63.13	63.50	64.58	65.28
7.....	69.40	68.62	-	67.65	66.71	65.74	64.05	63.25	63.15	63.50	64.60	65.25
8.....	69.33	68.46	-	67.58	66.62	65.71	63.99	63.25	63.20	63.50	64.60	65.35
9.....	69.20	68.64	-	67.58	66.60	65.65	63.93	63.30	63.24	63.57	64.80	65.15
10.....	69.20	68.62	-	67.49	66.55	65.55	63.83	63.29	63.24	63.53	64.82	65.25
11.....	69.25	68.59	-	67.53	66.50	65.53	63.80	63.20	63.05	63.55	64.80	65.27
12.....	69.25	68.53	-	67.45	66.48	65.47	63.70	63.25	63.03	63.63	64.60	65.28
13.....	69.23	68.60	-	67.42	66.46	65.47	63.67	63.25	63.00	63.85	64.89	65.38
14.....	69.19	68.44	-	67.40	66.42	65.44	63.65	63.05	63.15	63.83	64.85	65.35
15.....	69.15	68.39	-	67.42	66.40	65.40	63.45	63.05	63.15	63.76	64.90	65.30
16.....	69.00	68.40	-	67.34	66.36	65.33	63.55	63.13	63.15	63.80	64.90	65.37
17.....	69.00	68.42	-	67.34	66.33	65.30	63.53	63.10	63.20	63.83	64.95	65.35
18.....	69.00	68.45	-	67.32	66.26	65.32	63.53	62.92	63.20	63.57	65.08	65.37
19.....	68.95	68.26	-	67.28	66.26	65.28	63.53	62.50	63.17	64.00	64.95	65.30
20.....	68.99	68.19	-	67.27	66.24	65.21	63.40	62.66	63.00	64.50	64.95	65.32
21.....	68.97	68.25	-	67.27	66.19	65.20	63.43	62.83	63.15	64.57	64.92	65.22
22.....	68.90	68.17	-	67.22	66.17	65.13	63.35	62.58	63.13	64.53	64.95	65.32
23.....	68.89	67.96	-	67.22	66.09	65.10	63.26	62.66	63.10	64.53	64.95	65.30
24.....	68.72	68.28	-	67.22	66.07	65.09	63.15	62.75	63.04	64.15	64.96	65.40
25.....	68.75	68.36	-	67.15	66.10	64.99	63.25	62.88	63.19	64.20	64.96	65.25
26.....	68.75	68.36	-	67.07	66.03	64.90	63.29	63.00	63.07	64.28	65.05	65.27
27.....	68.73	-	-	-	66.06	64.80	63.25	62.67	63.20	64.40	65.25	65.37
28.....	68.66	-	-	67.00	-	64.73	63.17	63.00	63.20	64.42	65.15	65.55
29.....	68.76	-	-	66.98	-	64.65	-	63.00	63.17	64.35	65.38	65.55
30.....	68.57	-	-	66.95	-	64.60	63.05	63.10	63.35	64.40	65.18	65.52
31.....	68.57	-	-	66.92	-	64.53	-	63.13	-	64.55	65.19	-

Add 1,100.00 to obtain elevation in feet, Geodetic Survey of Canada datum, 1923 adjustment.

Location: Lat. 50° 35' 01", long. 93° 27' 15", Ontario, at Hydro-Electric Power Commission of Ontario power plant.
 Drainage Area: 14,280 square miles (an additional area of approximately 4,760 square miles contributes to the English River basin via Lake St. Joseph Diversion). Gauge: Recording. Period of Record: April 1956 to date. Extremes Recorded: Daily - Maximum, 29 April 1958, 21,100 cfs, Minimum, 3 March 1958, 1,760 cfs. Remarks: Records supplied by the Hydro-Electric Power Commission of Ontario.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	5,600	11,100	6,180	4,680	13,600	3,960	14,000	16,500	4,330	6,930	6,190	6,100
2.....	6,120	13,300	12,500	10,200	5,220	1,880	18,300	15,000	7,260	11,100	6,030	5,690
3.....	7,140	2,960	10,200	11,200	10,100	1,760	19,600	12,400	11,800	13,600	3,540	8,560
4.....	7,580	4,570	9,960	11,800	12,400	8,120	20,300	11,100	12,800	11,900	2,200	8,180
5.....	5,510	5,730	11,100	9,100	13,000	10,800	20,500	13,300	13,800	9,420	5,910	8,300
6.....	5,740	10,000	11,700	10,100	12,900	13,000	18,100	17,700	14,200	7,960	7,430	8,260
7.....	8,200	11,600	13,000	10,600	13,700	13,800	18,500	15,700	9,090	6,650	8,650	6,330
8.....	12,700	13,500	5,360	12,600	13,400	10,400	19,500	16,200	3,440	7,840	8,930	6,610
9.....	11,500	12,000	11,300	12,000	7,920	5,300	18,600	16,100	8,110	9,240	7,180	7,190
10.....	11,900	4,360	10,800	9,440	12,100	5,640	17,100	19,300	11,200	9,350	4,200	8,260
11.....	13,200	7,530	12,300	11,000	13,300	10,400	18,000	4,410	11,700	10,300	5,460	8,310
12.....	8,590	10,700	13,300	6,640	13,300	11,400	20,900	13,100	11,500	8,150	9,200	8,250
13.....	2,280	11,400	11,800	10,800	12,700	14,200	11,100	17,800	13,400	4,950	12,900	7,670
14.....	7,360	11,800	12,300	11,600	13,100	14,800	15,700	17,800	10,800	3,990	7,400	6,030
15.....	11,900	11,400	8,450	12,600	9,500	9,430	18,100	17,100	4,120	10,100	6,490	4,630
16.....	12,300	8,410	11,300	14,100	4,320	3,680	17,600	17,200	7,260	9,160	5,370	10,100
17.....	14,100	4,250	12,400	14,000	6,290	6,120	19,900	15,100	12,400	7,830	2,700	10,400
18.....	12,000	6,820	11,200	12,400	10,800	9,470	20,000	8,860	13,600	9,480	5,650	9,830
19.....	8,380	9,740	12,300	6,830	12,200	10,300	20,600	9,390	12,900	4,920	5,170	10,500
20.....	4,890	11,100	11,800	12,800	13,800	13,200	18,300	17,300	13,500	4,160	4,960	9,480
21.....	6,370	11,200	13,300	12,400	12,900	11,500	18,800	18,600	11,800	4,970	5,780	7,980
22.....	6,190	11,700	5,310	12,600	7,220	7,630	19,700	18,200	2,270	10,000	5,960	7,200
23.....	10,200	9,330	9,290	13,300	4,650	5,760	19,700	18,200	7,260	10,900	4,560	11,100
24.....	13,200	3,190	9,480	13,600	4,150	8,940	19,700	15,300	10,800	12,300	2,900	9,950
25.....	14,000	9,840	3,120	12,600	11,600	16,300	18,800	6,870	12,000	10,100	1,930	11,900
26.....	11,400	11,300	7,860	5,920	8,830	17,600	18,500	8,810	12,000	6,730	5,250	11,700
27.....	5,160	12,100	14,000	12,500	10,800	17,200	15,300	14,600	13,900	6,100	6,220	8,970
28.....	4,090	13,800	11,200	12,600	10,700	17,800	19,700	16,200	15,000	6,470	6,090	6,520
29.....	11,700	12,500	6,380	12,700	-	18,200	21,100	11,600	8,090	11,200	7,310	6,560
30.....	9,420	10,600	10,900	12,800	-	17,100	18,100	13,200	7,850	8,130	6,660	8,510
31.....	10,000	-	8,990	14,500	-	15,300	-	10,000	-	5,630	8,240	-
Mean	8,990	9,590	10,300	11,300	10,500	10,700	18,500	14,300	10,300	8,370	6,010	8,300
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	-	-	-	-	-	-	-	-	-	-

The Year.....Discharge: Daily - Maximum 29 April, 21,100
 - Minimum 3 March, 1,760

Mean 10,600

Runoff: Acre-feet 7,659,054

WABIGOON RIVER NEAR QUIBELL - STATION No. 5QD₆

Location: Lat. 49° 57' 20", long. 93° 23' 50", in NW. 1/4, lot 6, con. V, Wabigoon Township, Ontario, at bridge approximately one mile east of Quibell. Drainage Area: 2,460 square miles. Gauge: Recording; elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. Measurement of Discharge: From bridge. Period of Record: December 1953 to date. Average Discharge: (5 years) - 1,610 cfs. Extremes Recorded: Daily - Maximum, 16 May 1954, 8,350 cfs (elevation 1,115.15 ft.), Minimum, 29 December 1956, 222 cfs. Remarks: Records good. Open water June 1914 to September 1921 and continuous 1922 to November 1953 at location one mile below Canadian National Railways bridge (below Hutchinson Creek), Station No. 5QD₂. Extremes Recorded at this location: Maximum, 25 September 1941, 11,400 cfs, Minimum 27 September 1932, 105 cfs.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	1,070x	1,090	1,150	433	1,260	1,230	555	1,430	1,240	1,080	1,430	995
2.....	1,150	1,120	1,060	764	1,260	1,090	704	1,490	978	773	1,420	641
3.....	1,190	1,120	967e	1,160	815	794	1,250	1,610	950	802	1,370	728
4.....	1,220	668	981	1,260	912	938	1,400	1,730	1,160	1,030	1,080	953
5.....	1,210	812	1,040	1,280	1,030	1,140	1,490	1,580	1,400	1,270	1,080	1,070
6.....	1,200	878	1,080	794	1,070	1,180	1,730	1,540	1,610	1,480	1,150	1,120
7.....	1,090	950	1,090	954	1,160	1,220	1,560	1,640	1,610	1,440	1,200	1,160
8.....	1,140	1,030	1,090	1,050	1,160	1,260	1,320	1,670	1,560	1,490	1,260	1,200
9.....	1,160	1,070	978e	1,150	1,190	1,280	1,440	1,670	1,280	1,600	1,280	1,210
10.....	1,220	1,070	841e	1,200	785	764	1,560	1,660	1,160	1,590	1,240	1,210
11.....	1,240	874	950e	1,260	930	942	1,690	1,590	1,240	1,550	1,030	1,200
12.....	1,220	923	1,030	1,280	1,120	1,100	1,670	1,380	1,270	1,510	978	1,170
13.....	1,220	1,030	1,080	791	1,240	1,200	1,610	1,220	1,260	1,430	1,090	1,140
14.....	1,090	1,160x	1,250x	1,030	1,400	1,220	1,350	1,190	1,310	1,250	1,160	1,110
15.....	1,070	1,280	1,260	1,150	1,320	1,240	1,010x	1,170	1,320	1,340	1,220	911
16.....	1,160	1,300	845	1,200	1,010	942	1,150e	1,190	1,090	1,570	1,210	908
17.....	1,220	1,290	970	1,240	815	791	1,380	1,170	946	1,680	1,150	970
18.....	1,220	981	1,080e	1,270	912	970	1,460	1,120	1,060	2,000	883	1,020
19.....	1,220	848	1,220	1,280	1,090	1,160	1,540	890	1,100	2,360	911	1,040
20.....	1,220	900	1,220	797	1,240	1,230	1,530	641	1,130	2,310	1,050	1,040
21.....	845	946	1,240	986	1,260	1,260	1,220	746	1,180	1,950	1,120	1,040
22.....	549	1,000	1,220	1,100	1,010	1,260	922	960	1,220	1,740	1,140	1,060
23.....	672	1,090	1,240e	1,180	860	794	984	1,130	1,060	1,700	1,200	1,040
24.....	926	1,140	1,270	1,220	830	459	1,210	1,210	908	1,670	1,200	1,020
25.....	1,070	900e	815e	1,270	906	851	1,390	1,210	894	1,630	939	1,040
26.....	1,160	830e	535	1,280	1,090	1,100	1,470	981	1,000	1,610	953	1,070
27.....	1,070e	1,050	404	806	1,120	1,200	1,460	950	1,160	1,560	1,060	1,060
28.....	982	1,140	320	902	1,180	1,240	1,240	1,110	1,240	1,250	1,140	995
29.....	860	1,150	328e	1,000e	-	1,260	1,200	1,200	1,260	1,210	1,200	755
30.....	974	1,150	352	1,090	-	1,300	1,320	1,260	1,200	1,340	1,220	827
31.....	1,030	-	384	1,220	-	851	-	1,290	-	1,410	1,220	-
Mean	1,090	1,030	945	1,080e	1,070	1,070	1,330	1,280	1,190	1,500	1,150	1,020
Per sq. mi.	0.44	0.42	0.38	0.44e	0.43	0.43	0.54	0.52	0.48	0.61	0.47	0.41
Acre-feet	66,780	61,070	58,100	66,240e	59,460	65,980	78,970	78,600	71,000	92,480	70,580	60,900

The Year..... Discharge: Daily - Maximum 19 July, 2,360 (elevation 1,109.20)
 - Minimum 28 December, 320 (elevation 1,103.90)
 Instantaneous Maximum 8 p.m., 19 July, 2,410 (elevation 1,109.28)
 Mean 1,150; Per Square Mile 0.47
 Runoff: Acre-feet 830,200; Depth in inches on drainage area 6.32

e - Estimated 29 December to 29 January and as indicated.

x - Manual gauge readings 1 October to 14 November and 14 December to 15 April.

Location: Lat. 49° 56' 30", long. 95° 57' 30", on east boundary sec. 25, tp. 11, rge. 11, E. 1st Mer., Manitoba, at bridge, one-half mile east and one mile south of Whitemouth. Drainage Area: 1,450 square miles. Gauge: Chain; elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. Measurement of Discharge: From bridge or by wading. Period of Record: Mainly open water 1942 to 1955 and continuous March 1956 to date. Extremes Recorded: Daily - Maximum, 13 May 1950, 7,480 cfs (elevation 891.35 ft.), Minimum, 3 April 1949, 0 cfs. Remarks: Records good during open-water periods; fair during ice periods. Records were also collected for water years 1912 to 1922 and for open water 1923 to 1936 and published under the title "Whitemouth River at Whitemouth, Station No. 5PH₁".

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	40	73	28	18	30	95	142	82	42	71	596	84
2.....	40	73	33	17	30	113	128	87	40	85	503	91
3.....	43	84	32	16	30	111	138	85	37	84	472	82
4.....	38	82	31	16	30	82	142	82	35	115	436	75
5.....	38	79	31	15	30	61	190	115	47	328	403	73
6.....	38	88	34	15	29	50	240	132	82	1,040	431	65
7.....	38	98	37	14	28	39	188b	132	97	1,050	408	59
8.....	38	95b	38	14	28	34	196	132	115	1,060	376	56
9.....	38	88	37	24	28	30	154	127	112	1,010	336	52
10.....	40	82	26	21	28	30	144	118	112	924	306	47
11.....	44	79	27	23	29	30	132	109	112	916	280	47
12.....	48	57	27	25	27	29	123	100	103	704	231	48
13.....	51	54	26	22	27	28	114	88	98	627	200	46
14.....	53	47	28	21	23	29	115	87	96	620	192	42
15.....	54	41	27	24	21	29	109	88	90	852	170	39
16.....	65	38	29	25	21	30	97	87	85	892	162	36
17.....	65	46	31	26	21	29	88	87	82	880	140	34
18.....	66	62	33	26	21	28	88	87	69	876	114	31
19.....	95	55	33	26	21	26	82	85	73	852	96	30
20.....	100	50	35	26	22	26	85	81	58	808	90	28
21.....	104	64	35	26	26	28	87	77	59	796	84	27
22.....	100	48	36	26	27	36	87	73	59	980	77	27
23.....	100	48	30	25	27	39	85	73	60	1,140	74	27
24.....	102	48	28	25	31	47	73	78	58	1,180	74	27
25.....	100	48	26	25	35	55	69	78	56	1,220	74	26
26.....	100	46	26	28	40	111	66	69	53	1,160	74	26
27.....	84	43	25	31	40	116	61	59	52	1,100	73	25
28.....	82	38	22	31	68	126	59	57	52	1,000	73	31
29.....	81	34	21	30	-	134	57	56	59	824	77	31
30.....	81	30	18	29	-	146	77	51	59	750	80	32
31.....	78	-	17	29	-	150	-	47	-	686	81	-
Mean	66	61	29.3	23.2	29.2	62	114	87	72	795	219	44.8
Per sq. mi.	0.053	0.047	0.023	0.018	0.021	0.050	0.091	0.069	0.056	0.632	0.174	0.035
Acre-feet	4,040	3,610	1,800	1,430	1,620	3,800	6,780	5,370	4,270	48,850	13,450	2,670

The Year..... Discharge: Daily - Maximum 25 July, 1,220 (elevation 882.87)
Minimum 7 January, 14

Mean 135; Per Square Mile 0.093

Runoff: Acre-feet 97,690; Depth in inches on drainage area 1.269

b - Ice conditions 8 November to 7 April.

RED RIVER TRIBUTARY BASIN

RED RIVER AT EMERSON - STATION No. 50C₁

(International Gauging Station)

Location: Lat. 49° 00' 30", long. 97° 12' 40", in lot 3, block A of the Town of Emerson, Manitoba, fifteen hundred feet downstream from Canadian National Railways bridge. **Drainage Area:** 40,200 square miles (including 3,940 square miles of closed Devil's Lake Basin). **Gauge:** Recording; elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. **Measurement of Discharge:** From cableway, bridge and by wading. **Period of Record:** May 1912 to date. **Average Discharge:** (46 years) - 2,740 cfs. **Extremes Recorded:** Daily - Maximum, 13 May 1950, 94,400 cfs (elevation 790.84 ft.), Minimum, 6 to 8 February 1937, 0.9 cfs; **Instantaneous Maximum**, 5 p.m., 13 May 1950, 95,500 cfs (elevation 790.89 ft.). **Remarks:** Records good during open-water periods; fair during ice periods. This station is maintained by Canada under agreement with the United States.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	4,220	3,630	2,160	1,440	1,360	1,380	2,680	2,180	1,100	1,040	2,000	601
2.....	4,090	3,590	2,180	1,420	1,370	1,410	2,940	2,160	1,080	1,030	1,930	535
3.....	3,910	3,560	2,140	1,400	1,370	1,460	3,540	2,160	1,030	1,030	1,830	507
4.....	3,750	3,560	2,140	1,390	1,380	1,510	4,570	2,130	1,000	1,190	1,720	486
5.....	3,610	3,580	2,120	1,370	1,380	1,590	5,430	2,080	997	1,370	1,610	480
6.....	3,510	3,630	2,120	1,360	1,380	1,640	6,160b	2,020	1,010	1,450	1,490	472
7.....	3,430	3,740	2,120	1,340	1,380	1,660	5,280	1,970	1,020	1,740	1,360	469
8.....	3,390	3,870	2,120	1,340	1,380	1,660	4,650	1,920	1,040	2,900	1,210	462
9.....	3,350	3,900	2,120	1,350	1,380	1,660	4,200	1,890	1,090	4,760	1,070	450
10.....	3,340	3,850	2,140	1,360	1,380	1,660	3,790	1,840	1,190	6,480	979	448
11.....	3,370	3,810	1,940	1,380	1,380	1,660	3,460	1,830	1,440	7,570	929	445
12.....	3,440	3,650	1,780	1,390	1,360	1,680	3,290	1,820	1,660	7,880	906	439
13.....	3,510	3,490	1,640	1,390	1,310	1,740	3,170	1,770	1,780	7,760	904	428
14.....	3,570	3,470	1,530	1,390	1,280	1,820	3,130	1,710	1,830	7,330	899	417
15.....	3,620	3,660	1,510	1,390	1,270	1,920	3,170	1,680	1,870	6,950	858	409
16.....	3,640	3,770	1,470	1,390	1,250	1,980	3,270	1,640	1,990	6,480	808	423
17.....	3,640	3,740	1,430	1,380	1,240	2,020	3,300	1,570	2,070	6,090	792	446
18.....	3,630	3,790	1,370	1,380	1,230	2,030	3,240	1,520	2,060	5,750	790	448
19.....	3,690	3,800	1,350	1,390	1,220	2,030	3,120	1,490	1,970	5,460	780	444
20.....	3,850	3,780	1,350	1,400	1,210	2,030	3,000	1,450	1,850	5,130	764	425
21.....	4,090	3,780	1,350	1,410	1,220	2,030	2,900	1,420	1,730	4,760	738	418
22.....	4,260	3,460	1,360	1,410	1,220	2,040	2,790	1,410	1,630	4,410	710	418
23.....	4,310	3,210b	1,410	1,400	1,210	2,040	2,670	1,400	1,530	4,070	679	415
24.....	4,270	3,050	1,490	1,400	1,220	2,040	2,550	1,390	1,460	3,800	661	416
25.....	4,190	2,830	1,560	1,390	1,240	2,040	2,430	1,370	1,410	3,540	667	438
26.....	4,100	2,560	1,580	1,380	1,280	2,050	2,320	1,330	1,340	3,260	675	473
27.....	4,010	2,300	1,580	1,380	1,310	2,070	2,250	1,270	1,250	2,970	664	518
28.....	3,930	2,170	1,560	1,370	1,340	2,110	2,190	1,230	1,150	2,700	677	499
29.....	3,860	2,100	1,520	1,360	-	2,170	2,230	1,180	1,090	2,430	699	476
30.....	3,780	2,110	1,510	1,360	-	2,290	2,190	1,150	1,060	2,250	687	461
31.....	3,690	-	1,470	1,360	-	2,470	-	1,110	-	2,110	657	-
Mean	3,780	3,380	1,710	1,380	1,310	1,870	3,330	1,650	1,420	4,050	1,000	459
Per sq. mi.	0.09	0.08	0.04	0.03	0.03	0.05	0.08	0.04	0.04	0.10	0.02	0.01
Acre-feet	232,200	201,200	105,400	85,030	72,500	114,800	198,200	101,300	84,750	249,300	61,770	27,300

The Year..... Discharge: Daily - Maximum 12 July, 7,880 (elevation 757.23)
 - Minimum 15 September, 409 (elevation 745.53)
 Instantaneous Maximum 8 a.m., 12 July, 7,940 (elevation 757.17)
 Mean 2,120; Per Square Mile 0.05
 Runoff: Acre-feet 1,534,000; Depth in inches on drainage area 0.69

b - Ice conditions 23 November to 6 April.

Location: Lat. 49° 33' 40", long. 97° 10' 52", Manitoba, approximately one thousand feet above ferry crossing at Ste. Agathe. Drainage Area: 45,000 square miles. Gauge: Staff. Measurement of Discharge: From boat. Period of Record: Open water May 1958 to date. Extremes Recorded: Daily - Maximum, 14 July 1958, 8,640 cfs, Minimum, 14 September 1958, 340 cfs. Remarks: Records good.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	-	2,120e	1,740	1,170	2,660	678	850	-	-
2.....	-	-	-	-	2,060e	1,220	1,120	2,560	714	687	-	-
3.....	-	-	-	-	2,000e	1,220	1,080	2,420	750	600	-	-
4.....	-	-	-	-	1,930e	1,220	1,520	2,350	741	696	-	-
5.....	-	-	-	-	1,860e	1,220	1,840	2,	741	640	-	-
6.....	-	-	-	-	1,800e	1,120	2,130	1,950	696	620	-	-
7.....	-	-	-	-	1,740e	1,050	3,380	1,800	714	620	-	-
8.....	-	-	-	-	1,670	1,120	2,810	1,660	600	610	-	-
9.....	-	-	-	-	1,620	1,030	2,910	1,480	620	640	-	-
10.....	-	-	-	-	1,580	1,270	4,440	1,280	542	922	-	-
11.....	-	-	-	-	1,640	1,290	6,350	1,210	364	542	-	-
12.....	-	-	-	-	1,840	1,410	7,750	1,090	407	407	-	-
13.....	-	-	-	-	1,860	1,550	8,430	940	364	407	-	-
14.....	-	-	-	-	2,030	1,790	8,640	940	340	497	-	-
15.....	-	-	-	-	2,160	1,960	8,570	931	389	407	-	-
16.....	-	-	-	-	2,000	2,030	8,060	922	488	488	-	-
17.....	-	-	-	-	1,790	2,120	7,420	922	497	696	-	-
18.....	-	-	-	-	1,880	2,150	7,290	937e	452	790	-	-
19.....	-	-	-	-	1,880	2,220	6,940	952e	600	696	-	-
20.....	-	-	-	-	1,770	2,220	6,420	968	515	678	-	-
21.....	-	-	-	-	1,580	2,130	6,310	830	533	678	-	-
22.....	-	-	-	-	1,500	1,980	6,010	820	506	780	-	-
23.....	-	-	-	-	1,500	1,810	5,670	810	750	800	-	-
24.....	-	-	-	-	1,620	1,690	5,330	741	850	696	-	-
25.....	-	-	-	-	1,740	1,670	4,920	678	696	770	-	-
26.....	-	-	-	-	1,580	1,580	4,460	669	687	750	-	-
27.....	-	-	-	-	1,640	1,460	4,250	732	696	660	-	-
28.....	-	-	-	-	1,600	1,310	3,900	810	696	669	-	-
29.....	-	-	-	-	1,430	1,260	3,550	904	760	660	-	-
30.....	-	-	-	-	1,410	1,220	3,230	877	830	560	-	-
31.....	-	-	-	-	1,460	-	2,910	678	-	640	-	-
Mean	-	-	-	-	1,750	1,570	4,800	1,250	607	648	-	-
Per sq. mi.	-	-	-	-	0.039	0.035	0.107	0.028	0.013	0.014	-	-
Acre-feet	-	-	-	-	107,700	93,340	295,200	76,680	36,130	39,860	-	-

The Period.... Discharge: Daily - Maximum 14 July, 8,640
 (184 days) - Minimum 14 September, 340
 Mean 1,780; Per Square Mile 0.040
 Runoff: Acre-feet 648,900; Depth in inches on drainage area 0.270

e - Estimated.

Location: Lat. 49° 55' 00", long. 97° 07' 30", Manitoba, at Redwood Bridge, Winnipeg. Drainage Area: 111,000 square miles. Gauge: Wire-weight; elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. Measurement of Discharge: From bridge. Period of Record: Elevations August 1912 to date with miscellaneous measurements. Extremes Recorded: Daily - Maximum, 19 May 1950, 103,600 cfs (elevation 755.86 ft.), Minimum, November 1934, 724.49 feet. Remarks: Stage controlled by operation of St. Andrew's Dam at Lockport, Manitoba.

Daily Elevations in Feet for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	34.51	34.33	-	-	-	-	27.99	28.50	-	34.14	34.02	34.08
2.....	34.45	33.85	28.68	27.96	-	-	29.38	28.42	34.20	34.11	-	34.15
3.....	34.42	-	28.65	27.98	27.99	28.05	30.02	-	34.14	34.04	-	34.20
4.....	34.43	32.51	28.68	-	28.01	28.03	30.43	-	34.15	34.34	34.01	34.15
5.....	-	31.95	28.73	-	28.02	28.09	-	28.12	34.08	-	34.04	34.25
6.....	-	31.70	28.71	27.94	28.01	28.20	-	28.33	34.10	-	34.14	-
7.....	34.19	31.58	-	27.90	28.07	28.18	33.97	28.50	-	34.26	34.10	-
8.....	34.25	31.07	-	27.85	-	-	33.30	29.06	-	34.07	34.20	34.12
9.....	34.38	-	28.60	27.78	-	-	32.96	30.03	34.12	34.11	-	34.09
10.....	34.41	-	28.77	27.81	28.09	28.39	32.66	-	34.22	34.08	-	34.10
11.....	34.36	-	28.81	-	28.07	28.35	32.30	-	34.01	34.60	34.08	34.02
12.....	34.39	29.98	28.73	-	28.10	28.30	-	33.55	34.52	-	33.98	34.04
13.....	-	29.65	28.65	27.76	28.11	28.33	-	34.85	34.03	-	34.00	-
14.....	34.52	29.57	-	27.86	28.07	28.35	30.94	34.03	-	34.34	34.05	-
15.....	34.50	29.02	-	28.00	-	-	30.60	34.55	-	34.20	34.02	34.00
16.....	34.36	-	28.19	27.96	-	-	30.36	34.15	34.22	34.03	-	34.03
17.....	34.29	-	28.02	27.95	28.01	28.61	30.26	-	34.20	33.92	-	34.03
18.....	34.30	29.03	27.95	-	28.03	28.41	30.16	-	34.14	33.85	34.00	34.21
19.....	-	29.03	27.86	-	27.98	28.39	-	34.27	34.05	-	34.08	34.19
20.....	-	29.01	27.78	27.86	28.00	28.36	-	34.30	34.12	-	34.10	-
21.....	34.64	28.83	-	27.90	28.02	28.35	29.82	34.85	-	33.82	34.05	-
22.....	34.60	28.26	-	27.92	-	-	29.71	34.70	-	33.84	34.10	34.50
23.....	34.56	-	28.09	27.88	-	-	29.45	34.05	33.95	33.98	-	34.38
24.....	34.49	-	28.05	27.87	28.12	-	29.36	-	34.05	34.05	-	34.25
25.....	34.44	-	-	-	28.08	-	29.19	-	34.09	33.93	34.04	34.30
26.....	-	-	28.02	-	28.12	-	-	34.10	34.06	-	34.15	34.32
27.....	-	-	27.98	27.93	28.07	-	-	34.31	34.04	-	34.07	-
28.....	34.30	28.53	-	27.90	28.01	-	28.62	34.38	-	33.97	34.06	-
29.....	34.35	28.55	-	27.94	-	-	28.64	34.26	-	33.95	34.40	34.30
30.....	34.38	28.58	28.30	27.92	-	-	28.55	34.28	34.10	34.15	-	34.32
31.....	34.49	-	28.28	27.93	-	27.92	-	-	-	34.00	-	-

Add 700.00 to obtain elevation in feet, Geodetic Survey of Canada datum, 1928 adjustment.

Location: Lat. 49° 12' 40", long. 99° 08' 45", Manitoba, three miles south of Glenora. Gauge: Staff; elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. Period of Record: January 1949 to date. Extremes Recorded: Daily - Maximum, 24 April 1956, 1,336.52 feet, Minimum, 10 September 1958, 1,326.15 feet. Remarks: Records supplied by Manitoba Water Resources Branch.

Daily Elevations in Feet for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	-	8.22	7.93	-	7.39	7.65	-	-	-	-	7.66	7.22
2.....	8.08	8.22	-	-	-	-	-	7.94	7.94	7.79	7.64	-
3.....	-	-	7.71	-	-	7.68	8.05	7.93	-	-	-	7.18
4.....	8.03	8.21	-	7.11	7.43	-	8.61	-	7.94	-	7.59	7.17
5.....	7.98	-	7.66	-	-	-	8.63	7.93	-	7.83	-	-
6.....	8.03	8.21	-	-	-	7.72	-	-	-	-	7.53	7.14
7.....	8.08	-	7.61	7.11	-	-	8.63	7.93	7.94	7.81	-	-
8.....	8.13	8.21	-	-	7.46	7.75	-	-	-	-	-	-
9.....	-	-	7.57	-	-	-	8.63	-	7.93	7.79	7.44	-
10.....	8.13	8.21	-	7.11	-	7.78	-	7.94	-	-	-	6.15
11.....	-	-	-	-	7.48	-	-	-	7.89	7.77	7.41	-
12.....	8.13	8.20	7.51	-	-	-	-	7.94	-	7.74	-	-
13.....	-	-	-	-	-	7.81	-	-	7.87	-	7.38	6.18
14.....	8.13	8.18	7.46	7.15	-	-	-	7.94	7.84	7.74	-	-
15.....	-	-	-	-	7.51	7.85	-	-	7.84	-	-	6.22
16.....	8.13	8.18	7.41	-	-	-	-	-	-	7.74	7.34	-
17.....	-	8.13	-	7.19	-	7.88	8.64	7.94	7.82	-	-	6.25
18.....	8.13	-	7.36	-	7.46	-	-	7.94	-	-	7.34	-
19.....	8.13	8.08	-	-	-	7.91	8.29	-	7.79	7.74	-	-
20.....	8.12	-	-	7.24	-	-	-	-	-	7.74	7.34	6.27
21.....	-	8.03	7.31	-	-	-	8.24	7.94	7.79	-	-	-
22.....	8.10	-	-	-	7.53	7.95	8.14	-	7.84	7.73	-	-
23.....	-	-	-	-	-	-	-	-	-	-	7.34	6.92
24.....	8.10	8.01	7.26	-	7.55	8.05	8.04	7.94	7.82	7.72	-	-
25.....	-	-	-	7.31	-	-	-	-	-	-	7.31	6.91
26.....	8.10	7.98	-	-	7.59	8.15	7.99	7.94	7.81	7.71	-	-
27.....	-	-	-	-	-	-	-	-	-	-	7.29	6.91
28.....	8.18	7.96	7.21	7.35	-	-	7.98	7.94	7.79	7.69	-	-
29.....	-	-	-	-	-	8.25	-	-	-	-	7.23	6.90
30.....	8.20	-	-	-	-	-	7.96	7.94	7.79	7.67	-	-
31.....	-	-	7.16	-	-	-	-	-	-	-	-	-

Add 1,320.00 to obtain elevation in feet, Geodetic Survey of Canada, 1928 adjustment.

PEMBINA RIVER NEAR KALEIDA - STATION No. 50B₈

Location: Lat. 49° 03' 30", long. 98° 27' 50", in NW. 1/4 sec. 22, tp. 1, rge. 8, W. 1st Mer., Manitoba, at bridge four and one-half miles south of Kaleida. Drainage Area: 2,650 square miles. Gauge: Staff and recording. Measurement of Discharge: From bridge or by wading. Period of Record: October 1957 to date. Extremes Recorded: Daily - Maximum, 6 April 1958, 303 cfs, Minimum, 2, 15 and 18 to 29 September 1958, 0.2 cfs. Remarks: Records good during open-water periods; fair during ice periods.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	140	86	65	49	22	13	85	141	34.0	14.5	1.8	0.3
2.....	141	84	67	49	21	13	101	145	30.8	12.5	1.6	0.2
3.....	139	83	72	50	23	12	151	137	30.8	12.0	1.0	0.3
4.....	141	91	74	48	22	12	198	124	30.0	25.1	3.8	0.4
5.....	130	75	76	46	21	12	240b	128	27.2	28.6	2.4	0.4
6.....	139	75	80	46	19	12	303	114	25.1	25.8	1.4	0.8
7.....	143	74	84	47	19	12	274	109	24.4	14.5	1.0	0.4
8.....	147	61	84	48	19	12	180	104	24.4	12.5	0.8	0.4
9.....	143	61	86	48	19	13	167	100	23.7	11.5	0.8	0.4
10.....	141	53	87	46	19	13	153	96	23.0	9.0	0.8	0.3
11.....	135	64	89	44	18	13	139	90	21.8	8.0	2.8	0.3
12.....	128	70	89	42	18	13	130	84	20.6	7.5	1.4	0.4
13.....	128	71	87	39	18	13	131	79	20.6	20.0	0.8	0.3
14.....	147	64	86	37	16	14	130	71	20.0	16.0	0.7	0.3
15.....	167	61	84	36	14	14	128	70	19.4	14.5	0.5	0.2
16.....	176	62	83	34	14	14	130	77	18.2	15.5	0.4	0.3
17.....	180	52	80	33	14	14	133	75	17.0	14.5	0.5	0.3
18.....	180	54	77	32	15	14	131	67	17.0	12.5	0.4	0.2
19.....	174	50	75	29	16	14	139	65	17.0	9.0	0.4	0.2
20.....	163	51	71	28	15	16	141	70	14.5	8.0	0.6	0.2
21.....	155	49b	70	27	13	16	149	68	14.5	6.2	0.5	0.2
22.....	147	40	67	26	13	18	153	60	12.5	4.2	0.4	0.2
23.....	157	38	64	26	14	19	151	54	12.5	3.8	0.5	0.2
24.....	133	35	64	26	15	20	143	52	13.0	10.5	0.4	0.2
25.....	120	44	59	25	16	22	141	48.0	15.0	7.0	0.4	0.2
26.....	103	50	54	25	15	24	139	45.2	12.5	7.0	0.5	0.2
27.....	91	52	54	24	14	26	137	42.5	10.5	5.8	0.5	0.2
28.....	117	55	54	24	14	33	137	39.8	10.0	4.2	0.5	0.2
29.....	101	62	51	24	-	40	141	42.5	9.0	2.8	0.5	0.2
30.....	94	67	50	24	-	51	155	39.8	9.0	2.8	0.4	0.5
31.....	89	-	51	23	-	66	-	37.2	-	2.4	0.4	-
Mean	138	61	72	35.6	17.0	19.3	154	80	19.3	11.2	0.9	0.3
Per sq. mi.	0.052	0.023	0.027	0.013	0.006	0.007	0.058	0.030	0.007	0.004	0.000	0.000
Acre-feet	8,510	3,640	4,430	2,190	944	1,190	9,180	4,910	1,150	691	57	18

The Year.....Discharge: Daily - Maximum 6 April, 303
 - Minimum at various times 0.2
 Mean 51; Per Square Mile 0.019
 Runoff: Acre-feet 36,910; Depth in inches on drainage area 0.259

b - Ice conditions 21 November to 5 April.

(International Gauging Station)

Location: Lat. 48° 59' 20", long. 97° 33' 05", in NW. 1/4 sec. 31, tp. 164 N., rge. 53 W., North Dakota, above concrete dam. Drainage Area: 3,189 square miles. Gauge: Recording. Measurement of Discharge: From bridge or by wading. Period of Record: May 1903 to September 1915 and continuous April 1919 to date (May 1903 to September 1907, October 1908 to September 1914, fragmentary). Average Discharge: (41 years) - 155 cfs. Extremes Recorded: Daily - Maximum, 20 April 1950, 7,700 cfs (ice conditions), Minimum, Nil at various times; Instantaneous Maximum, 9:30 a.m., 20 April 1950, 10,700 cfs (ice conditions). Remarks: Records good except those for periods of shifting control, which are fair, and those for periods of ice effect, which are poor. This station is maintained by the United States under agreement with Canada.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	143	159	60	45	22	26	72	164	64	21	9.8	2.8
2.....	140	146	60	45	22	24	90	164	61	21	9.8	2.4
3.....	137	143	60	45	22	24	113	164	61	21	8.9	4.6
4.....	140	137	60	45	20	26	191	164	61	30	8.1	3.3
5.....	146	131	60	40	20	26	254	164	61	42	7.2	2.4
6.....	156	128	60	40	20	24	318	164	61	54	6.5	1.2
7.....	165	131	60	40	20	24	371	164	58	109	6.5	1.2
8.....	172	100b	60	40	20	24	371	160	54	83	6.5	2.8
9.....	168	40	65	40	20	24	327	154	50	69	6.5	2.8
10.....	165	50	65	40	20	24	300	146	45	52	6.5	3.3
11.....	165	70b	65	40	20	24	258	143	43	43	5.8	5.8
12.....	165	74	70	40	20	24	230	136	42	35	5.1	4.6
13.....	165	99	70	38	20	22	220	146	40	35	5.1	3.7
14.....	165	110	70	38	20	22	202	143	36	31	4.6	2.4
15.....	162	113	70	38	20	20	192	136	35	28	4.2	2.4
16.....	159	100b	65	37	20	20	188	129	31	35	3.7	2.4
17.....	159	100	70	37	20	18	185	122	31	31	4.2	2.0
18.....	172	90	70	36	20	18	185	112	31	27	3.7	2.4
19.....	182	65	65	36	20	18	182	112	31	25	3.7	1.2
20.....	188	65	65	34	20	18	182	112	31	24	3.7	1.2
21.....	191	60	60	32	20	18	178	106	30	21	5.1	1.2
22.....	191	60	60	30	20	18	178	103	28	20	4.6	1.2
23.....	191	55	60	30	22	20b	178	99	27	19	4.2	1.6
24.....	188	50	60	28	22	23	178	99	25	17	4.2	1.6
25.....	182	50	60	28	24	24	178	96	24	16	5.1	0.9
26.....	172	50	60	26	24	24	178	96	22	15	6.5	0.9
27.....	162	50	55	26	26	24	174	86	22	14	2.8	1.2
28.....	159	55	55	24	26	26	171	83	21	14	2.0	0.8
29.....	156	60	50	24	-	30	164	80	20	13	2.0	0.9
30.....	156	60	50	24	-	39	157	74	19	12	2.0	4.2
31.....	159	-	45	22	-	55	-	69	-	11	2.4	-
Mean	165	86.7	61.5	35.1	21.1	24.2	206	125	38.8	31.9	5.19	2.31
Per sq. mi.	0.052	0.027	0.019	0.011	0.007	0.008	0.065	0.039	0.012	0.010	0.002	0.001
Acre-feet	10,160	5,160	3,780	2,160	1,170	1,490	12,230	7,720	2,310	1,960	319	138

The Year..... Discharge: Daily - Maximum 7 April, 371
 - Minimum 28 September, 0.8
 Instantaneous Maximum 4:30 p.m., 7 April, 442
 Mean 67.1; Per Square Mile 0.021
 Runoff: Acre-feet 48,600; Depth in inches on drainage area 0.287

b - Ice conditions 8 to 11 November and 16 November to 23 March.

PELICAN LAKE NEAR NINETTE - STATION No. 50A₄

Location: Lat. 49° 24' 00", long. 99° 36' 20", Manitoba, one mile east of Ninette. Gauge: Staff; elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. Period of Record: May 1954 to date. Extremes Recorded: Daily - Maximum, 7 June 1954, 1,352.03 feet, Minimum, 24 May 1954, 1,348.65 feet. Remarks: Records supplied by Manitoba Water Resources Branch.

Daily Elevations in Feet for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	-	-	-	-	-	-	-	-	-	10.14	10.04	9.78
2.....	-	-	-	-	-	-	-	-	-	10.09	10.04	9.78
3.....	-	-	-	-	-	-	-	-	-	10.04	10.04	9.68
4.....	-	-	-	-	-	-	-	-	-	10.04	10.04	9.58
5.....	-	-	10.80	-	-	-	-	-	-	10.04	9.94	9.58
6.....	-	-	-	-	-	-	-	-	-	10.04	9.94	9.58
7.....	-	-	-	-	-	-	-	-	-	10.04	9.94	9.58
8.....	-	-	-	-	-	-	-	-	-	10.14	9.84	9.48
9.....	-	-	-	-	-	-	-	-	-	10.14	9.84	9.48
10.....	-	-	-	-	10.02	-	-	-	-	10.04	9.84	9.58
11.....	-	-	-	-	-	-	-	-	10.27	10.04	9.74	9.48
12.....	-	-	-	-	-	-	-	-	10.25	10.04	9.74	9.48
13.....	-	-	-	-	-	-	-	-	10.24	10.14	9.74	9.48
14.....	-	-	-	-	-	-	-	-	10.24	10.14	9.74	9.48
15.....	-	-	-	-	-	-	-	-	10.24	10.24	9.74	9.48
16.....	-	-	-	-	-	-	11.09	-	10.24	10.24	9.74	9.48
17.....	-	-	-	-	-	-	-	-	10.14	10.14	9.74	9.48
18.....	-	-	-	-	-	-	-	-	10.14	10.14	9.74	9.48
19.....	-	-	-	-	-	-	-	-	10.14	10.14	9.74	9.48
20.....	-	-	-	-	-	-	-	-	10.14	10.14	9.74	9.38
21.....	-	-	-	-	-	-	-	-	10.14	10.14	9.64	9.38
22.....	-	-	-	-	-	-	-	-	10.14	10.14	9.64	9.38
23.....	-	-	-	-	-	-	-	-	10.14	10.14	9.54	9.42
24.....	-	-	-	-	-	-	-	-	10.14	10.04	9.54	9.37
25.....	-	-	-	-	-	-	-	-	10.14	10.04	9.54	9.27
26.....	-	-	-	-	-	-	-	-	10.14	10.04	9.64	9.27
27.....	-	-	-	-	-	-	-	-	10.14	10.04	9.64	9.27
28.....	-	-	-	-	-	-	-	-	10.14	10.04	9.64	9.17
29.....	-	-	-	-	-	-	-	-	10.14	10.04	9.68	9.17
30.....	-	-	-	-	-	-	-	-	10.14	10.04	9.68	9.17
31.....	-	-	-	-	-	-	-	-	-	10.04	9.78	-

Add 1,340.00 to obtain elevation in feet, Geodetic Survey of Canada datum, 1928 adjustment.

(International Gauging Station)

Location: Lat. 48° 58' 54", long. 96° 27' 46", in SW. 1/4 sec. 34, tp. 164 N., rge. 45 W., Minnesota, four hundred feet downstream from State Ditch No. 51. **Drainage Area:** Approximately 1,570 square miles. **Gauge:** Recording; elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. **Measurement of Discharge:** From cableway or by wading. **Period of Record:** April 1929 to date (some winter records incomplete). **Average Discharge:** (14 years) - 309 cfs. **Extremes Recorded:** Daily - Maximum, 19 May 1950, 4,020 cfs (elevation 1,013.86 ft.), Minimum, 13 August 1936, 0.1 cfs (elevation 1,003.02 ft.); Instantaneous Maximum, 8:30 p.m., 19 May 1950, 4,080 cfs (elevation 1,013.95 ft.). **Remarks:** Records good except those for period of ice effect, which are fair. This station is maintained by the United States under agreement with Canada.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	592	432	-	-	-	-	100b	91	42	42	308	22
2.....	537	402	-	-	-	-	130	103	41	37	251	22
3.....	482	370	-	-	-	-	155	113	43	36	207	20
4.....	411	359	-	-	-	-	170	111	44	44	176	18
5.....	344	364	-	-	-	-	220	122	47	83	153	18
6.....	300	381	-	-	-	-	360	120	54	193	140	18
7.....	293	397	-	-	-	-	420b	120	66	384	130	17
8.....	293	350b	-	-	-	-	345	123	89	580	108	16
9.....	353	400	-	-	-	-	297	122	108	701	78	16
10.....	404	425	-	-	-	-	261	116	120	762	64	16
11.....	468	500b	-	-	-	-	235	106	109	785	54	15
12.....	527	568	-	-	-	-	213	103	104	791	48	14
13.....	527	514	-	-	-	-	189	105	93	791	45	14
14.....	484	487	-	-	-	-	182	105	86	791	44	14
15.....	460	432	-	-	-	-	182	101	78	800	37	13
16.....	451	-	-	-	-	-	180	91	70	820	36	12
17.....	542	-	-	-	-	-	162	86	64	826	30	12
18.....	692	-	-	-	-	-	158	85	57	850	30	12
19.....	763	-	-	-	-	-	142	85	55	868	28	11
20.....	771	-	-	-	-	-	139	80	56	874	27	11
21.....	757	-	-	-	-	-	128	72	44	868	25	9.1
22.....	730	-	-	-	-	-	123	68	42	853	25	7.6
23.....	714	-	-	-	-	-	113	67	37	823	25	7.6
24.....	689	-	-	-	-	-	108	62	36	779	22	8.5
25.....	662	-	-	-	-	-	103	56	36	707	22	8.2
26.....	633	-	-	-	-	-	96	53	35	629	22	7.6
27.....	571	-	-	-	-	52b	91	48	33	564	25	7.0
28.....	589	-	-	-	-	60	98	45	36	502	25	6.6
29.....	527	-	-	-	-	65	86	44	40	447	25	7.0
30.....	494	-	-	-	-	70	96	44	39	393	25	8.2
31.....	460	-	-	-	-	75	-	43	-	345	24	-
Mean	533	-	-	-	-	-	176	86.8	60.1	580	72.9	12.9
Per sq. mi.	0.339	-	-	-	-	-	0.112	0.055	0.038	0.369	0.046	0.008
Acre-feet	32,770	-	-	-	-	-	10,480	5,340	3,580	35,640	4,480	770

The Period.....Discharge: Daily - Maximum 20 July, 874
(214 days) - Minimum 27 September, 6.6

b - Ice conditions 8 to 11 November and 27 March to 7 April.

ROSEAU RIVER NEAR DOMINION CITY - STATION No. 50D₁

Location: Lat. 49° 11' 53", long. 97° 03' 15", in SE. 1/4 sec. 12, tp. 3, rge. 3, E. 1st Mer., Manitoba, eight miles northeast of Dominion City. Drainage Area: 1,840 square miles. Gauge: Tape-weight; elevations referred to Geodetic Survey of Canada datum, 1923 adjustment. Measurement of Discharge: From bridge or by wading. Period of Record: Mainly open water 1913-1914; 1928-1947; continuous July 1916 to November 1927 and April 1948 to date. Average Discharge: (21 years) - 332 cfs. Extremes Recorded: Daily - Maximum, 6 May 1950, 8,130 cfs (elevation 796.82 ft.), Minimum, at various times, 0 cfs. Remarks: Records good during open-water periods; fair during ice periods. For the period May to December 1912 records were published under title "at Dominion City", Station No. 50D₂; and from April 1914 to June 1916 under "below Dominion City", Station No. 50D₃.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	762	474	248	22	26	28	84	125	72	47	371	24
2.....	711	440	200	21	25	26	81	123	64	51	327	25
3.....	667	410	168	22	24	26	84	124	67	50	284	23
4.....	582	378	154	24	24	28	98	128	67	98	245	22
5.....	494	356	145	24	24	28	130	132	64	319	217	21
6.....	425	352	124	27	24	30	240	135	62	163	187	19
7.....	362	365	106	28	24	35	407b	132	66	163	162	20
8.....	342	389	102	34	22	47	587	130	69	309	148	18
9.....	334	428	98	32	22	53	378	127	81	461	138	18
10.....	347	455	81	28	22	59	346	131	116	552	118	17
11.....	403	591	66	26	20	60	304	128	128	650	98	16
12.....	482	494	61	26	20	62	270	121	130	698	82	14
13.....	516	549	56	25	17	62	245	116	116	746	75	14
14.....	531	482	52	25	18	60	218	114	113	765	69	14
15.....	520	484b	50	26	19	59	204	110	104	750	62	12
16.....	508	496	51	26	19	56	202	112	97	750	57	12
17.....	487	559	46	25	20	53	200	107	91	759	50	12
18.....	520	540	45	26	20	49	190	100	82	820	46	11
19.....	623	595	45	27	20	46	168	96	75	848	43	11e
20.....	720	580	45	28	20	45	170	94	69	848	39	10
21.....	792	518	45	29	20	46	147	93	62	852	38	10e
22.....	796	425	42	30	20	47	147	89	57	852	33	10
23.....	789	382	44	27	21	49	141	87	55	844	31	9e
24.....	764	446	39	26	23	50	130	84	51	837	28	8
25.....	737	471	38	26	23	52	124	82	52	801	27	9e
26.....	714	534	35	28	25	53	119	79	51	746	26	10
27.....	680	568	32	28	26	56	114	75	44	612	24	10e
28.....	646	440	32	27	28	60	112	72	42	596	22	9
29.....	600	364	30	27	-	63	115	67	42	520	22	9e
30.....	554	272	25	27	-	68	116	66	40	466	22	9e
31.....	511	-	24	27	-	76	-	69	-	416	23	-
Mean	578	461	75	26.6	22.0	49.4	196	105	74	561	100	14.2
Per sq. mi.	0.314	0.250	0.041	0.014	0.012	0.027	0.107	0.057	0.040	0.305	0.054	0.008
Acre-feet	35,540	27,450	4,620	1,630	1,220	3,040	11,640	6,440	4,420	34,490	6,180	845

The Year..... Discharge: Daily - Maximum 21 and 22 July, 852 (elevation 783.82)
 - Minimum 24 September, 8 (elevation 777.45)
 Mean 190; Per Square Mile 0.103
 Runoff: Acre-feet 137,500; Depth in inches on drainage area 1.400

b - Ice conditions 15 November to 7 April.

e - Estimated.

(International Gauging Station)

Location: Lat. 48° 59' 33", long. 95° 39' 43", in NE. 1/4 sec. 34, tp. 164 N., rge. 39 W., Minnesota, one-half mile south of International Boundary. **Drainage Area:** 151 square miles. **Gauge:** Recording; elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. **Measurement of Discharge:** From bridge and by wading. **Period of Record:** September 1928 to date (winter records incomplete prior to 1941). **Average Discharge:** (19 years) - 59.0 cfs. **Extremes Recorded:** Daily - Maximum, 1 September 1942, 1,960 cfs (elevation 1,053.42 ft.), Minimum, Nil at various times; **Instantaneous Maximum,** 7 p.m., 1 September 1942, 2,070 cfs (elevation 1,053.71 ft.). **Remarks:** Records good except those for periods of ice effect, which are poor. This station is maintained by the United States under agreement with Canada.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	24	34	4.6	2.2	1.4	40	30	6.2	6.8	5.2	28	6.8
2.....	22	34	3.0	2.0	1.4	25	31	8.0	6.8	5.2	24	6.4
3.....	20	34	2.5	1.8	1.4	20	25	16	7.3	6.0	20	5.6
4.....	20	34	2.8	1.8	1.4	12	26	18	7.8	11	16	5.2
5.....	20	33	4.0	1.8	1.4	10	22	18	11	54	13	5.0
6.....	20	33	4.2	1.8	1.4	9.5	18	18	15	114	22	5.0
7.....	31	33	3.0	2.0	1.2	9.0	25	15	15	146	17	5.4
8.....	36	33	3.0	2.0	1.2	8.5	32	14	13	157	14	5.4
9.....	36	32b	4.0b	2.0	1.2	8.5	25b	13	11	164	12	5.0
10.....	33	26b	3.2	2.0	1.2	8.5	20	13	11	161	12	4.5
11.....	32	28	1.2	2.0	1.2	9.0	13	13	11	151	9.4	4.0
12.....	30	28	1.2	2.0	1.2	8.0	15	13	13	135	8.6	3.6
13.....	29	32	2.1	1.8	1.2	7.5	11	12	12	119	7.1	3.3
14.....	32	37	4.0	1.8	1.2	7.0	10	11	11	123	6.6	3.2
15.....	34	41	4.0	1.8	1.2	6.0	9.4	11	9.7	137	6.0	3.0
16.....	69	38b	2.9	1.8	1.2	5.5	8.0	12	8.6	136	6.0	2.8
17.....	69	36	1.8	1.8	1.2	4.0	7.5	12	7.3	140	5.4	2.9
18.....	59	34	3.2	1.6	1.2	3.0	6.4	11	6.6	153	5.2	2.9
19.....	53	30	4.0b	1.6	1.2	2.4	9.1	11	6.6	151	4.7	2.8
20.....	49	28	4.0	1.6	1.2	2.8	8.6	11	6.2	131	3.8	2.8
21.....	48	26	3.8	1.6	1.2	3.5	6.6	10	6.2	109	3.6	2.3
22.....	48	22	3.4	1.4	1.2	3.8	6.6	9.7	6.2	86	3.9	2.0
23.....	48	18	3.4	1.2	2.0	4.0	6.4	8.8	5.8	72	4.4	1.7
24.....	44	16	3.4	1.0	5.0	5.0	6.0	8.8	5.4	63	5.4	1.9
25.....	41	14	3.2	1.2	10	6.0	5.8	8.3	5.2	66	9.7	2.0
26.....	38	12	3.2	1.2	15	7.5	5.6	8.0	5.4	65	10	2.1
27.....	35	10	2.8	1.2	20	9.0	5.2	7.1	5.6	58	9.1	2.2
28.....	34	10	2.6	1.2	40	14	6.0	6.8	5.4	52	8.3	2.2
29.....	34	9	2.4	1.4	-	18	6.2	6.6	5.0	46	7.5	2.3
30.....	35	8	2.2	1.4	-	24	6.2	6.6	4.4	40	7.3	2.7
31.....	35	-	2.2	1.4	-	24	-	6.6	-	34	7.3	-
Mean	37.4	26.8	3.07	1.66	4.27	10.5	13.8	11.1	8.38	93.2	10.2	3.57
Per sq. mi.	0.25	0.18	0.02	0.01	0.03	0.07	0.09	0.07	0.06	0.62	0.07	0.02
Acre-feet	2,300	1,590	189	102	237	645	818	681	498	5,730	629	212

The Year..... Discharge: Daily - Maximum 9 July, 164 (elevation 1,044.10)
 - Minimum 24 January, 1.0
 Instantaneous Maximum 7 a.m., 10 July, 165 (elevation 1,044.11)
 Mean 18.8; Per Square Mile 0.12
Runoff: Acre-feet 13,631; Depth in inches on drainage area 1.69

b - Ice conditions 16 November to 9 December, 19 December to 9 April and as indicated.

BOYNE RIVER NEAR STEPHENFIELD - STATION No. 50F₆

Location: Lat. 49° 30' 48", long. 98° 14' 58", in NW. 1/4 sec. 29, tp. 6, rge. 6, W. 1st Mer., Manitoba, at bridge, one-half mile north of Stephenfield. Drainage Area: 398 square miles. Gauge: Staff. Measurement of Discharge: From bridge or by wading. Period of Record: August 1952 to date. Average Discharge: (6 years) - 47.2 cfs. Extremes Recorded: Daily - Maximum, 21 April 1956, 1,580 cfs, Minimum, Nil at various times. Remarks: Records good during open-water periods; fair during ice periods. Prior to 1958 records were published under title "Morris River near Stephenfield".

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	3	5	2	1	0	10	214	27	5	1	2	0
2.....	3	6	2	1	0	10	213	28	5	1	2	0
3.....	3	6	2	1	0	8	211	29	5	2	1	0
4.....	3	6	2	1	0	10	167	28	5	3	1	0
5.....	4	6	2	1	0	8	157	27	4	5	1	0
6.....	4	6	3	1	0	7	130	26	4	3	1	1
7.....	4	7	3	1	0	7	104	35	3	2	1	1
8.....	3	7	3	1	0	7	93	40	2	2	1	0
9.....	4	7	3	1	0	7	84	32	2	2	1	0
10.....	4	7	3	1	0	7	82	22	2	1	1	0
11.....	4	6	3	1	0	7	71	21	2	1	1	0
12.....	5	6	3	1	0	8	64	20	2	1	1	0
13.....	5	7	2	1	0	7	60	18	2	1	1	0
14.....	5	7	2	1	0	7	56	18	2	3	0	0
15.....	5	7	2	1	0	7	52	18	2	11	1	0
16.....	7	7	2	1	0	7	48	17	2	12	1	0
17.....	6	7	2	1	0	7	45	16	2	12	1	0
18.....	6	7	2	0	0	7	42	15	2	8	1	0
19.....	6	6	2	0	0	8	40	13	2	7	1	0
20.....	6	6	2	0	0	8	38	13	2	5	1	0
21.....	6	6	2	0	0	9	38	13	2	4	1	0
22.....	6	6	2	0	1	9	36	12	2	3	1	1
23.....	6	6	2	0	1	11	35	11	2	4	1	1
24.....	7	6	2	0	2	13	32	10	1	4	1	1
25.....	6	5b	1	0	3	60	30	10	1	6	1	0
26.....	7	4	1	0	7	125	28	9	1	5	1	0
27.....	6	4	1	0	9	172	26	8	1	5	0	0
28.....	6	3	1	0	10	210	24	7	1	4	0	0
29.....	5	3	1	0	-	212	25	6	1	3	0	1
30.....	5	3	1	0	-	177	26	6	1	2	0	1
31.....	5	-	1	0	-	219b	-	6	-	2	0	-
Mean	5.0	5.8	2.0	0.5	1.2	44.2	76	18.1	2.3	4.0	0.9	0.2
Per sq. mi.	0.013	0.015	0.005	0.001	0.003	0.111	0.191	0.045	0.006	0.010	0.002	0.001
Acre-feet	307	347	123	34	65	2,720	4,500	1,110	139	248	54	14

The Year..... Discharge: Daily - Maximum 31 March, 219

- Minimum at various times, 0

Mean 13.4; Per Square Mile 0.034

Runoff: Acre-feet 9,660; Depth in inches on drainage area 0.457

b - Ice conditions 25 November to 31 March.

Location: Lat. 49° 31' 00", long. 97° 56' 50", on south boundary, sec. 33, tp. 6, rge. 4, W. 1st Mer., Manitoba, at bridge, one-half mile north and two and one-half miles east of Carman. Drainage Area: 531 square miles. Gauge: Tape-weight. Measurement of Discharge: From bridge or by wading. Period of Record: Mainly open water 1915, 1916, 1919 to 1931, and 1956 to date. Extremes Recorded: Daily - Maximum, 22 April 1923, 2,490 cfs, Minimum, Nil at various times. Remarks: Records fair. Prior to 1958, records were published under title "Morris River near Carman".

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	5b	215	15	8	0	5	0	0	-	-
2.....	-	-	5	200	14	7e	0	3	0	0	-	-
3.....	-	-	6	204	15	7	0	3	0	0	-	-
4.....	-	-	6	207	15	7	3	3	0	0	-	-
5.....	-	-	7	196	19	7	3e	2	0	0	-	-
6.....	-	-	7	173	18	6	4	1	0	0	-	-
7.....	-	-	7	149	17	5	19	1	0	0	-	-
8.....	-	-	7	133	17	4	7	1	0	0	-	-
9.....	-	-	7	127	16	4	2	1e	0	0	-	-
10.....	-	-	8	98	32	5	2	1	0	0	-	-
11.....	-	-	8	92b	22	4	2	0	0	0	-	-
12.....	-	-	8	78	20	3	1	0	0	0	-	-
13.....	-	-	7	73	16	3	3	0	0	0	-	-
14.....	-	-	7	66	14	2	1	0	0	0	-	-
15.....	-	-	7	60	15	2	0	0	0	0	-	-
16.....	-	-	8	57	14	2e	0	0	0	0	-	-
17.....	-	-	8	48	14	1	27	0	0	0	-	-
18.....	-	-	8	38	14	1	19	0	0	0	-	-
19.....	-	-	8	37e	12	0	16e	0	0	0	-	-
20.....	-	-	8	35	12	4	12	0	0	0	-	-
21.....	-	-	8	35	10	3	10	0	0	0	-	-
22.....	-	-	7	31	10	2	9	0	0	0	-	-
23.....	-	-	8	29	10	1	8	0	0	0	-	-
24.....	-	-	8	24	9	1	7e	0	0	0	-	-
25.....	-	-	8	23e	8	1	7	0	0	0	-	-
26.....	-	-	8	22	12	0	6	0	0	0	-	-
27.....	-	-	8	20	8	0	7	0	0	0	-	-
28.....	-	-	135	18	8	0	8	0	0	0	-	-
29.....	-	-	154	21	7	0	7	0	0	0	-	-
30.....	-	-	183	17	9	0	7	0	0	0	-	-
31.....	-	-	179	-	8	-	6	0	-	0	-	-
Mean	-	-	27.4	84	13.9	3.0	6.5	0.7	0.0	0.0	-	-
Per sq. mi.	-	-	0.052	0.158	0.026	0.006	0.012	0.001	0.000	0.000	-	-
Acre-feet	-	-	1,680	5,010	853	179	403	42	0	0	-	-

The Period.....Discharge: Daily - Maximum 1 April, 215
 (245 days) - Minimum at various times, 0
 Mean 16.8; Per Square Mile 0.032
 Runoff: Acre-feet 8,170; Depth in inches on drainage area 0.287

b - Ice conditions 1 March to 11 April.

e - Estimated.

RAT RIVER NEAR OTTERBURNE - STATION No. 50E₁

Location: Lat. 49° 27' 42", long. 97° 00' 26", in SE. 1/4 sec. 8, tp. 6, rge. 4, E. 1st Mer., Manitoba, four miles south-east of Otterburne. Drainage Area: 704 square miles. Gauge: Staff; elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. Measurement of Discharge: From bridge or by wading. Period of Record: Continuous May 1912 to September 1921 and April 1948 to date; mainly open water 1922 to 1936, 1942 to 1947. Average Discharge: (17 years)-96 cfs. Extremes Recorded: Daily - Maximum, 6 May 1950, 5,850 cfs (elevation 778.03 ft.), Minimum, at various times, 0 cfs. Remarks: Records good during open-water periods; fair during ice periods.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	24	25	18	9	2	7	50	40e	39	10	39	1
2.....	20	24e	17	7	2	7	56	44	43e	9	35	2e
3.....	20e	24	16	4	1	8	64	52	46e	45e	28	2
4.....	20	24	15	4	3	9	70	52	49	80e	26	3
5.....	18	24	17	3	3	9	73	56	48	120	23	2e
6.....	18	24	16	4	3	10	79	59e	42	155e	20	2
7.....	18	27	15	2	3	10	96b	62	40	192	14	2
8.....	21	29e	15	2	3	10	98	63e	39	184	12	3
9.....	19e	31	15	3	3	10	112	64e	44e	145	12	3e
10.....	17	28	15	3	4	10	89	66	48	125e	14	4
11.....	17e	28	14	4	4	10	74e	61	48	105	7	3e
12.....	16e	28	14	3	3	10	60	57	48	104e	7	2e
13.....	15	26	12	3	2	11	61	57	40	103	7	2
14.....	16e	31b	11	3	2	11	57	53	36e	148	7	1
15.....	18	27	13	3	1	11	54	50	32	148	6	1
16.....	20	35	11	4	1	11	51	52	29	138	5	1
17.....	23	31	13	4	1	12	47	45	30	125	5	1
18.....	20	33	12	5	1	11	47e	51	27e	124e	5e	1
19.....	20e	30	15	5	1	11	48	43	24e	123e	5	1
20.....	21e	29	16	5	1	11	48	42	21	122	4e	1
21.....	22e	28	14	5	1	12	47e	47	20	118e	3e	1
22.....	23e	27	14	4	2	12	47	41	20	115e	2e	1e
23.....	24	26	13	3	2	13	45	40	17	112	2e	1
24.....	22	26	12	3	2	13	43	40	17	109	1	1e
25.....	36	25	10	3	2	16	48	33	14	112	2	1e
26.....	29	24	12	3	4	21	32	34	14	104	3e	1e
27.....	24	23	13	3	5	30	35	32	14e	90e	5	1
28.....	26	24	10	3	5	32	40	32	14	75e	4	1
29.....	27	23	9	3	-	34	33	32	10e	61	7	2
30.....	28	22	8	3	-	38	36	31	7	56	1	2e
31.....	25	-	8	3	-	43	-	29	-	49	2	-
Mean	21.5	26.9	13.3	3.7	2.4	14.9	58.0	47.1	30.7	107.0	10.1	1.7
Per sq. mi.	0.031	0.038	0.019	0.005	0.003	0.021	0.082	0.067	0.044	0.152	0.014	0.002
Acre-feet	1,320	1,600	819	230	133	918	3,450	2,900	1,820	6,560	621	99

The Year..... Discharge: Daily - Maximum 7 July, 192 (elevation 762.71)

- Minimum at various times, 1

Mean 28.1; Per Square Mile 0.040

Runoff: Acre-feet 20,470; Depth in inches on drainage area 0.544

b - Ice conditions 14 November to 7 April.

Location: Lat. 49° 40' 47", long. 97° 25' 40", in SW. 1/4 sec. 29, tp. 8, rge. 1, E. 1st Mer., Manitoba, about one-quarter mile below P.F.R.A. Dam. Drainage Area: 681 square miles. Gauge: Staff. Measurement of Discharge: From bridge or by wading. Period of Record: Daily discharges during open water 1922 to 1925, 1927 to 1930, 1934 and continuous 1956 to date. Gauge heights only during open water 1915 to 1918, 1921, 1926, 1935, 1950, 1951 and 1955. Extremes Recorded: Daily - Maximum, 29 April 1923, 2,980 cfs, Minimum, Nil at various times. Remarks: Records fair. Records for open water 1935 and 1936 were obtained at La Salle, Station No. 50G₂.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	6	0.5	0	0	0	0	179	0.5	0.4	2.1	2.1	2.1
2.....	6	0.6	0	0	0	0	177	0.5	1.1	2.1	2.1	1.2
3.....	6	1	0	0	0	0	164	1.8	1.1	3	2.1	0.1
4.....	6	1	0	0	0	0	135b	12	1	56	2.1	0
5.....	5	1	0	0	0	0	92	23	1	124	2.1	0
6.....	5	1	0	0	0	0	47	25	3	198	2.1	0
7.....	5	1b	0	0	0	0	35	22	4	198	2.1	0
8.....	5	1	0	0	0	0	27	19	4	118	2.1	0
9.....	5	1	0	0	0	0	13	13	4	78	2.1	0
10.....	4	1	0	0	0	0	3	6	4	58	2.1	0
11.....	4	1	0	0	0	0	0.9	3	4	47	2.1	0
12.....	4	1	0	0	0	0	0.3	1	2.1	38	2.1	0
13.....	4	1	0	0	0	0	0.1	0.6	2.1	56	1.6	0
14.....	3	1	0	0	0	0	0	0.8	2.1	78	1.6	0
15.....	3	1	0	0	0	0	0	1	2.1	89	1.6	0
16.....	3	0.5	0	0	0	0	0	1	2.1	111	1.6	0
17.....	3	0.5	0	0	0	0	0.5	1	2.1	94	1.2	0
18.....	2	0.5	0	0	0	0	0.0	0.5	3	80	0.8	0
19.....	2	0.5	0	0	0	0	0.2	0.2	3	56	0.4	0
20.....	2	0.5	0	0	0	0	0.3	0.2	3	40	0	0
21.....	2	0.5	0	0	0	0	0.2	0.4	3	28	0	0
22.....	2	0.5	0	0	0	0	0.2	0.4	2.1	23	0	0
23.....	2	0.5	0	0	0	0	0.2	0.2	2.1	19	0	0
24.....	1	0.5	0	0	0	0.5	0.2	0.1	2.1	17	0	0
25.....	0.6	0.5	0	0	0	1	0.2	0.2	2.1	7.5	0	0
26.....	0.3	0.5	0	0	0	5	0.3	0.1	1.6	5	0	0
27.....	0.3	0.5	0	0	0	58	0.2	0.1	1.6	4	0.8	0
28.....	0.2	0	0	0	0	130	0.3	0.1	1.6	3	2.1	0
29.....	0.4	0	0	0	-	173	0.4	0.0	2.1	3	1.6	0
30.....	0.4	0	0	0	-	186	0.5	0.0	2.1	2.1	1.6	0
31.....	0.4	-	0	0	-	180	-	0.1	-	2.1	0	-
Mean	3.0	0.7	0.0	0.0	0.0	23.7	29.2	4.3	2.3	53.0	1.3	0.1
Per sq. mi.	0.004	0.001	0.000	0.000	0.000	0.035	0.043	0.006	0.003	0.078	0.002	0.000
Acre-feet	184	40	0	0	0	1,450	1,740	266	138	3,250	80	7.0

The Year.....Discharge: Daily - Maximum 6 and 7 July, 198 (elevation 701.64)
- Minimum at various times, 0

Mean 9.9; Per Square Mile 0.015

Runoff: Acre-feet 7,160; Depth in inches on drainage area 0.196

b - Ice conditions 7 November to 4 April.

SEINE RIVER NEAR PRAIRIE GROVE - STATION No. 5OH₆

Location: Lat. 49° 46' 15", long. 96° 56' 10", in river lot 34, Parish of Lorette, Manitoba, at bridge, one-quarter mile south of mile post 9, Highway No. 12. Drainage Area: 495 square miles. Gauge: Staff. Measurement of Discharge: From bridge or by wading. Period of Record: Mainly open water 1942 to 1947 and continuous April 1948 to date. Average Discharge: (10 years) - 71 cfs. Extremes Recorded: Daily - Maximum, 7 May 1950, 2,840 cfs, Minimum, Nil at various times. Remarks: Records good during open-water periods; fair during ice periods. Data for open water 1915 to 1927 were obtained at Canadian National Railways crossing, Ste. Anne Des Chenes, Station No. 5OH₁, and 1928 to 1936, in lot 29, Ste. Anne, Station No. 5OH₃.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	7	14	8	1	4	1	50	20	15	14	18	6
2.....	9	18	7	1	3	1	44	22	15	11	17	11
3.....	15	16	7	1	3	2	38	25	16	22	15	2
4.....	12	13	6	2	2	2	37	26	18	20	13	1
5.....	13	14	6	1	2	2	36	25	29	65	11	2
6.....	15	15	6	1	2	3	35	32	33	330	10	2
7.....	13	18	6	1	2	3	34	36	48	274	9	3
8.....	16	20b	6	3	1	3	33	33	42	222	8	3
9.....	15	8	4	5	1	3	31	32	40	181	7	3
10.....	17	12	6	4	1	3	32	31	39	138	6	3
11.....	19	14	6	3	1	3	32	29	39	118	6	2
12.....	18	15	5	3	1	3	32b	29	32	89	5	1
13.....	17	16	4	2	2	3	31	28	29	73	6	1
14.....	10	15	4	2	2	3	30	29	29	70	3	1
15.....	11	15	5	3	1	3	29	26	31	74	3	1
16.....	12	17	5	3	1	3	23	26	24	85	3	2
17.....	12	22	4	3	1	3	24	28	22	74	3	3
18.....	15	16	5	3	1	3	24	23	20	58	2	2
19.....	14	19	5	3	1	3	25	21	20	48	2	1
20.....	14	15	5	3	1	3	24	21	19	43	2	1
21.....	14	12	4	3	1	3	24	20	17	39	2	1
22.....	13	11	5	3	1	3	23	21	15	38	2	0
23.....	12	11	4	2	1	3	21	20	14	37	2	0
24.....	13	11	3	2	1	4	22	21	13	34	2	1
25.....	12	12	4	3	1	4	22	20	14	33	3	1
26.....	11	9	4	4	1	6	22	17	15	29	2	1
27.....	11	10	3	3	1	13	21	17	12	25	1	1
28.....	12	10	3	4	1	26	20	17	12	29	1	1
29.....	14	9	1	4	7	58	20	18	14	28	1	2
30.....	13	9	1	4	-	57	18	17	17	25	3	2
31.....	12	-	1	3	-	52	-	17	-	22	4	-
Mean	13.3	13.9	4.6	2.7	1.5	9.1	28.6	24.1	23.4	76	5.6	2.0
Per sq. mi.	0.027	0.028	0.009	0.005	0.003	0.018	0.058	0.049	0.047	0.152	0.011	0.004
Acre-feet	815	825	284	165	81	559	1,700	1,480	1,390	4,660	341	121

The Year..... Discharge: Daily - Maximum 6 July, 330
 - Minimum 22 and 23 September, 0
 Mean 17.2; Per Square Mile 0.035
 Runoff: Acre-feet 12,420; Depth in inches on drainage area 0.467

b - Ice conditions 8 November to 12 April.

Location: Lat. 50° 07' 49", long. 96° 50' 30", Parish of St. Clements, Manitoba, Henderson Highway bridge. Drainage Area: 255 square miles. Gauge: Wire-weight; elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. Measurement of Discharge: From bridge or by wading. Period of Record: Mainly open water 1957 to date. Open water 1927 to 1929 at Van Horne's Farm, lat. 50° 07' 19", long. 96° 49' 20". Extremes Recorded: Daily - Maximum, 25 April 1957, 2,250 cfs (elevation 724.61 ft.), Minimum, at various times, 0 cfs. Remarks: Records good during open-water periods; fair during ice periods. Referred to as Station No. 50J₅ in W.R.P. 121.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	1b	18	2.2	Nil	10	9.3	Nil	Nil	-	-
2.....	-	-	1	8	2.2	"	20	7.8	"	"	-	-
3.....	-	-	1	10	2.2	"	45	6.3	"	"	-	-
4.....	-	-	1	12	2.2	"	77	7.5	"	"	-	-
5.....	-	-	1	6	2.2	"	108	5.8	"	"	-	-
6.....	-	-	1	6	2.2	"	173	4.8	"	"	-	-
7.....	-	-	1	4	8.4	"	240	3.8	"	"	-	-
8.....	-	-	1	3.5	4.5	"	102	2.9	"	"	-	-
9.....	-	-	1	4.2b	3.5	"	50e	2.1	"	"	-	-
10.....	-	-	1	4.2	1.6	"	21	0.9	"	"	-	-
11.....	-	-	1	3.2	1.1	"	20	0.4	"	"	-	-
12.....	-	-	1	3.2	0.4	"	9.9	0.2	"	"	-	-
13.....	-	-	1	3.2	0.2	"	11	Nil	"	"	-	-
14.....	-	-	1	3.2	0	"	11	"	"	"	-	-
15.....	-	-	1	3.2	0	"	7.8	"	"	"	-	-
16.....	-	-	1	2.8	0	"	6.0	"	"	"	-	-
17.....	-	-	1	2.8	0	"	6.3	"	"	"	-	-
18.....	-	-	1	2.8	0.1	"	15	"	"	"	-	-
19.....	-	-	1.5	2.8	0.2	"	14	"	"	"	-	-
20.....	-	-	1.5	2.8	0.2	"	11	"	"	"	-	-
21.....	-	-	1.5	2.8	0.2	"	9.6	"	"	"	-	-
22.....	-	-	1.5	2.8	0	"	11	"	"	"	-	-
23.....	-	-	1.5	2.8	0	"	10	"	"	"	-	-
24.....	-	-	1.5	2.8	0	"	9.9	"	"	"	-	-
25.....	-	-	1.5	2.8	0	"	8.7	"	"	"	-	-
26.....	-	-	1.5	2.8	0	"	9.3	"	"	"	-	-
27.....	-	-	1.5	2.8	0	"	13	"	"	"	-	-
28.....	-	-	8	2.8	0	Nil	22	"	"	"	-	-
29.....	-	-	20	8.8	0	0.2e	16	"	"	"	-	-
30.....	-	-	20	2.8	0	3.5	14	"	Nil	"	-	-
31.....	-	-	17	-	0	-	11	Nil	-	Nil	-	-
Mean	-	-	3.1	4.7	1.1	0.1	35.2	1.7	Nil	Nil	-	-
Per sq. mi.	-	-	0.012	0.018	0.004	0.000	0.138	0.007	Nil	Nil	-	-
Acre-feet	-	-	191	277	67	7	2,170	103	Nil	Nil	-	-

The Period..... Discharge: Daily-Maximum 7 July 240e
 (245 days) -Minimum at various times Nil

Mean 5.8; Per Square Mile 0.023

Runoff: Acre-feet 2,820; Depth in inches on drainage area 0.206

b - Ice conditions 1 March to 9 April.

e - Estimated 29 June to 9 July.

MISCELLANEOUS DISCHARGE MEASUREMENTS MADE IN RED RIVER TRIBUTARY BASIN
FOR THE YEAR 1958

Date	Stream	Location	Discharge cfs
11 April	Red River	At Redwood Bridge, Winnipeg	11,500
16 April	"	"	7,180
2 May	"	"	4,120
18 July	"	"	9,410
9 Jan.	Red River	At Head of Lister's Rapids	1,780b
7 Feb.	"	"	1,560b
6 March	"	"	1,770b
30 Dec.	"	"	585b
4 June	Red River	One mile below St. Andrew's Dam	2,550
10 July	"	"	5,070
16 Sept.	"	"	692
14 Nov.	"	"	1,330

ASSINIBOINE RIVER AT STURGIS - STATION No. 5MC₁

Location: Lat. 51° 56' 19", long. 102° 32' 14", in NW. 1/4 sec. 20, tp. 34, rge. 4, W. 2nd Mer., Saskatchewan, at dam, two hundred feet upstream from bridge. Drainage Area: 884 square miles. Gauge: Staff, above dam; elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. Measurement of Discharge: From bridge or by wading. Period of Record: Mainly open water 1944 to date. Extremes Recorded: Daily - Maximum, 14 June 1954, 3,310 cfs (elevation 1,638.38 ft.), Minimum, Nil at various times. Remarks: Records good.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	<u>1</u>	65	42	9	10				-	-
2.....	-	-	1e	72	42	10	14				-	-
3.....	-	-	1	<u>100</u>	42	9	8				-	-
4.....	-	-	1	97	42	9	9				-	-
5.....	-	-	1	80	<u>46</u>	6	14				-	-
6.....	-	-	1	72	46	6	10				-	-
7.....	-	-	2	72	42	6	8				-	-
8.....	-	-	2	86	34	6	6				-	-
9.....	-	-	2	86	38	6	5				-	-
10.....	-	-	3	80	26	8	5				-	-
11.....	-	-	3	72	26	9	2				-	-
12.....	-	-	3e	65	26	11	4				-	-
13.....	-	-	3	65	23	17	4				-	-
14.....	-	-	4e	60	20	<u>20</u>	6				-	-
15.....	-	-	4	55	20	18	5	} 0	} 0	} 0	-	-
16.....	-	-	4e	55	17	18	1				-	-
17.....	-	-	4e	55	17	17	1				-	-
18.....	-	-	4e	60	14	17	1				-	-
19.....	-	-	4e	70	11	17	1				-	-
20.....	-	-	4e	70	12	14	0				-	-
21.....	-	-	4e	70	12	12	0				-	-
22.....	-	-	4	65	12	10	0e				-	-
23.....	-	-	4	65	12	8	0				-	-
24.....	-	-	4	55	12	8	0				-	-
25.....	-	-	6	55	11	6	0				-	-
26.....	-	-	6	55	11	6	0				-	-
27.....	-	-	9	55	9	9	0				-	-
28.....	-	-	11	48	6	9	0				-	-
29.....	-	-	12	48	<u>5</u>	10	0				-	-
30.....	-	-	17	<u>46</u>	6	6	0				-	-
31.....	-	-	<u>38</u>	-	9	-	0		-	e	-	-
Mean	-	-	5.4	67	22.3	10.6	3.7	0e	0e	0e	-	-
Per sq. mi.	-	-	0.006	0.076	0.025	0.012	0.004	0	0	0	-	-
Acre-feet	-	-	331	3,960	1,370	629	226	0	0	0	-	-

The Period.....Discharge: Daily - Maximum 3 April, 100 (elevation 1,634.70)
 (245 days) - Minimum at various times, 0
 Mean 13.4; Per Square Mile 0.015
 Runoff: Acre-feet 6,520; Depth in inches on drainage area 0.139

e - Estimated 2 to 12 March, 22 July to 31 October and as indicated.

ASSINIBOINE RIVER NEAR KAMSACK - STATION No. 5MD₄

Location: Lat. 51° 33' 38", long. 101° 54' 40", in NW. 1/4 sec. 34, tp. 29, rge. 32, W. 1st Mer., Saskatchewan, below junction with Whitesand River at bridge, Highway No. 5. Drainage Area: 4,860 square miles. Gauge: Chain; recording from 13 March, 1958; elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. Measurement of Discharge: From bridge or by wading. Period of Record: Mainly open water 1944 to 1955 and continuous April 1956 to date. Extremes Recorded: Daily - Maximum, 17 June 1954, 9,500 cfs (elevation 1,427.95 ft.), Minimum, Nil at various times. Remarks: Records good during open-water periods; fair during ice periods.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	17	3	15	6	7	11	140	142	43	9	2	1
2.....	15	3	15	6	7	10	343	141	45	7	1	1
3.....	14	3	16	6	8	10	414	143	42	4	1	1
4.....	12	4	15	6	8	10	453	141	42	5	1	1
5.....	11	4	16	6	8	10	537b	136	42	7	1	1
6.....	9e	4	16	6	9	10	602	127	41	7	1	1
7.....	8	4	16	6	9	10	596	124	39	6	1	1
8.....	6	5	16	6	10	10	543	120	37	4	1	1
9.....	6	5	16	6	10	9	488	119	34	4	1	1
10.....	5	5	16	5	10	9	446	116	30	4	1	1
11.....	4	6	16	5	11	8	390	113	27	4	1	1
12.....	4	6	16	5	11	8	354	106	25	3	1	1
13.....	4e	7	15	5	11	8	319	104	23	4	1	1
14.....	4	7	14	5	11	8	290	96	20	4	1	1
15.....	3	8	13	5	12	9	265	90	18	3	1	1
16.....	3	8	12	5	12	9	241	86	16	3	1	1
17.....	3	9	11	5	12	9	225	84	15	4	1	1
18.....	3	10	10	5	12	9	209	76	14	3	1	1
19.....	3	10	10	5	13	9	209	68	12	2	1	1
20.....	2e	10	10	5	12	9	208	64	10	2	1	2
21.....	2	11	9	5	12	9	206	60	15	2	1	2
22.....	2	11	9	5	12	9	201	58	16	2	1	1
23.....	2b	11b	8	6	12	9	195	56	16	2	1	1
24.....	2	12	7	6	12	9	182	53	15	2	1	1
25.....	2	12	7	6	11	10	169	49	15	2	1	1
26.....	2	13	7	6	11	10	164	49	15	2	1	1
27.....	2b	13	7	6	11	10	163	48	14	2	1	1
28.....	2	14	7	6	11	10	154	48	13	2	1	1
29.....	3	14	7	6	-	11	149	44	11	2	1	1
30.....	3	14	6	6	-	20	148	45	9	2	1	1
31.....	3	-	6	7	-	46	-	45	-	2	1	-
Mean	5.2	8.2	11.8	5.6	10.5	10.9	300	89	23.8	3.6	1.0	1.1
Per sq. mi.	0.001	0.002	0.002	0.001	0.002	0.002	0.062	0.018	0.005	0.001	0.000	0.000
Acre-feet	321	488	724	345	585	670	17,860	5,460	1,420	220	63	63

The Year..... Discharge: Daily - Maximum 6 April, 602 (elevation 1,412.98)
 - Minimum August and September, 1 (elevation 1,407.04)
 Instantaneous Maximum 2:30 p.m., 7 April, 619 (elevation 1,413.11)
 Mean 39.0; Per Square Mile 0.008
 Runoff: Acre-feet 28,220; Depth in inches on drainage area 0.107

b - Ice conditions 23 to 27 October and 23 November to 5 April.

e - Estimated.

Location: Lat. 50° 48' 35", long. 101° 26' 10", Manitoba, at traffic bridge on Highway No. 4, seven miles west of Russell. Drainage Area: 7,640 square miles. Gauge: Recording; elevations referred to Geodetic Survey of Canada datum. Measurement of Discharge: From bridge and by wading. Period of Record: Continuous 1913 to 1932 and 1951 to date; open water 1942 to 1950; Records prior to 19 January 1958 were collected "at Millwood" approximately eight miles downstream. Average Discharge: (27 years) - 698 cfs. Extremes Recorded: Daily - Maximum, 29 April 1922, 17,800 cfs (elevation 1,334.67 ft.), Minimum, 29 December 1914, 20 cfs. Remarks: Records good during open-water period; fair during ice periods.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	89	119	86	67	68	66	433	321	154	80	62	121
2.....	87	119b	86	67	68	66	580	318	162	82	62	119
3.....	100	116	84	67	68	66	615	308	170	82	58	108
4.....	84	112	84	67	68	68	601	299	165	88	58	111
5.....	88	108	82	66	68	68	615b	289	162	90	56	106
6.....	95	106	82	66	66	68	741	289	156	90	56	93
7.....	102	104	80	66	66	68	925	289	148	93	54	82
8.....	106	100	80	66	66	68	1,240	289	140	95	52	77
9.....	112	100	80	66	66	70	1,080	286	135	93	50	68
10.....	116	100	79	65	66	70	925	279	129	93	49	66
11.....	116	100	79	65	64	70	790	273	124	90	47	64
12.....	114	98	77	65	64	70	762	270	119	88	44	62
13.....	114	98	75	64	64	70	706	263	116	88	44	62
14.....	114	98	75	64	64	70	657	254	116	85	42	62
15.....	112	98	75	63	63	70	626	247	111	85	41	60
16.....	110	97	75	63	63	72	580	238	108	82	39	60
17.....	112	97	74	62	63	72	545	225	106	82	38	62
18.....	114	97	74	62	63	72	514	219	103	77	38	70
19.....	116	97	74	61	63	74	492	203	103	72	36	72
20.....	118	98	74	63	63	74	475	194	101	68	35	77
21.....	116	98	74	63	63	74	458	187	101	64	34	80
22.....	114	97	74	64	63	74	440	178	98	64	35	82
23.....	116	97	75	64	63	76	430	170	95	64	35	80
24.....	116	95	75	66	63	76	412	165	90	62	34	77
25.....	114	93	75	66	64	76	394	165	88	60	34	78e
26.....	116b	91	75	66	64	78	380	162	85	62	36	79e
27.....	114	89	74	68	66	84	363	162	85	62	39	80e
28.....	114b	87	72	68	66	90	350	162	85	62	47	81e
29.....	118	86	70	68	-	99	337	154	85	62	56	80e
30.....	116	86	69	68	-	238	324	151	82	62	62	79e
31.....	121	-	67	68	-	388	-	151	-	64	82	-
Mean	109	99	77	63	65	89	593	231	117	77	47	80
Per sq.mi.	0.014	0.013	0.010	0.008	0.009	0.012	0.078	0.030	0.015	0.010	0.006	0.010
Acre-feet	6,730	5,910	4,710	3,880	3,600	5,440	35,290	14,200	6,990	4,740	2,890	4,760

The Year.....Discharge: Daily - Maximum 8 April, 1,240 (elevation 1,338.98)
 - Minimum 24 August, 34 (elevation 1,335.73)
 Instantaneous Maximum 3:30 p.m., 8 April, 1,280 (elevation 1,339.03)
 Mean 137; Per Square Mile 0.018
 Runoff: Acre-feet 99,140; Depth in inches on drainage area 0.244

b - Ice conditions 26 to 28 October and 2 November to 5 April.

e - Estimated.

ASSINIBOINE RIVER AT BRANDON - STATION No. 5MH₁

Location: Lat. 49° 51' 02", long. 99° 56' 12", in NW. 1/4 sec. 24, tp. 10, rge. 19, W. 1st Mer., Manitoba, at First Street traffic bridge. Drainage Area: 35,550 square miles. Gauge: Wire-weight; elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. Measurement of Discharge: From bridge or by wading. Period of Record: July 1912 to date. Average Discharge: (46 years) - 1,210 cfs. Extremes Recorded: Daily - Maximum, 7 May 1923, 23,000 cfs (elevation 1,178.27 ft.), Minimum, 21 February 1942, 7.0 cfs. Remarks: Records good during open-water periods; fair during ice periods.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	290	446	326	176	158	148	2,380	890	550	259	182	81
2.....	330	482	314	182	140	162	2,710	895	525	264	175	75
3.....	350	514	302	190	151	158	3,010	910	515	272	178	81
4.....	370	510	306	168	168	144	2,770	940	485	295	178	78
5.....	370	494	278	162	165	176	3,610	967	460	290	175	81
6.....	366	498	260	158	144	168	4,770b	972	450	272	172	81
7.....	374	490	252	144	168	165	4,290	978	450	264	161	84
8.....	386	462	242	158	165	165	3,700	978	440	242	158	84
9.....	346	474	232	144	172	172	3,200	989	455	222	158	96
10.....	290	418	221	137	176	182	2,830	1,000	500	230	161	147
11.....	390	386	196	127	193	179	2,530	1,010	490	246	150	133
12.....	418	418	224	124	176	168	2,390	1,000	455	272	130	144
13.....	422	410	232	130	182	172	2,270	989	435	345	133	147
14.....	414	390	235	134	168	182	2,140	978	415	405	122	154
15.....	402	410b	228	144	172	179	1,970	967	400	415	112	172
16.....	378	406	224	151	190	186	1,830	950	375	385	116	150
17.....	354	418	214	140	193	190	1,630	940	330	360	108	136
18.....	330	414	200	144	176	186	1,550	930	335	370	96	133
19.....	298	430	196	144	162	182	1,390	880	330	360	87	130
20.....	410	434	190	144	154	179	1,340	865	320	345	93	140
21.....	430	430	179	154	154	179	1,260	840	305	330	87	126
22.....	426	482	193	144	179	186	1,220	820	315	310	84	133
23.....	434	434	179	148	158	190	1,170	795	305	295	112	130
24.....	326	454	168	151	158	179	1,120	775	290	272	99	136
25.....	362	418	190	137	151	190	1,070	755	268	259	96	122
26.....	386	362	190	137	130	286	1,030	730	272	238	99	96
27.....	366	398	176	134	165	600	989	685	259	230	96	87
28.....	426	350	186	140	154	925	962	670	264	234	96	126
29.....	398	358	165	154	-	1,530	920	650	259	222	93	172
30.....	374	358	172	162	-	2,040	925	620	250	218	93	168
31.....	394	-	165	137	-	2,250	-	585	-	200	84	-
Mean	375	432	220	148	165	387	2,100	869	383	288	125	121
Per sq. mi.	0.011	0.012	0.006	0.004	0.005	0.011	0.059	0.024	0.011	0.008	0.004	0.003
Acre-feet	23,030	25,680	13,560	9,120	9,170	23,800	124,900	53,460	22,810	17,690	7,700	7,190

The Year..... Discharge: Daily - Maximum 6 April, 4,770
 - Minimum 2 September, 75 (elevation 1,161.50)
 Mean 467; Per Square Mile 0.013
 Runoff: Acre-feet 338,100; Depth in inches on drainage area 0.179

b - Ice conditions 15 November to 6 April.

Location: Lat. 49° 56' 09", long. 98° 16' 48", in SW. 1/4 sec. 19, tp. 11, rge. 6, W. 1st Mer., Manitoba, at traffic bridge, three miles southeast of Portage la Prairie. Drainage Area: 62,140 square miles. Gauge: Wire-weight; elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. Measurement of Discharge: From bridge or by wading. Period of Record: Mainly open water April 1922 to September 1930 and continuous August 1952 to date. Average Discharge: (6 years) - 3,040 cfs. Extremes Recorded: Daily - Maximum, 24 May 1955, 22,200 cfs (elevation 853.95 ft.), Minimum, 21 January 1953, 186 cfs. Remarks: Records good during open-water periods; fair during ice periods.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	717	800	736	329	313	350	2,300	1,550	880	516	396	296
2.....	693	735	681	319	313	346	2,600	1,450	852	500	380	288
3.....	693	768	627	306	313	392	3,180	1,470	824	520	372	288
4.....	681	839	644	303	319	385	4,500	1,430	790	528	380	280
5.....	675	858	656	306	319	370	5,900b	1,430	758	558	348	272
6.....	705	904	656	303	316	360	5,580	1,450	739	576	332	272
7.....	711	846	665	309	319	360	6,070	1,430	703	572	324	264
8.....	723	917	669	306	313	370	6,650	1,430e	691	544	320	260
9.....	742	603	702	309	309	378	6,020	1,430e	691	528	312	252
10.....	774	665b	686	303	309	367	6,560	1,430	697	536	316	244
11.....	800	730	665	306	309	367	4,700	1,440	685	488	312	236
12.....	774	805	652	306	309	364	4,310	1,470	675	468	304	244
13.....	768	880	644	296	309	364	3,950	1,450	670	464	312	244
14.....	780	930	631	290	309	367	3,400	1,440	691	500	300	248
15.....	754	1,040	627	287	303	370	3,420	1,430	675	685	292	248
16.....	768	1,010	618	284	300	374	3,210	1,430	660	540	288	280
17.....	774	935	606	280	300	364	3,000	1,390	670	615	284	288
18.....	748	982	602	290	296	360	2,840	1,340	655	605	272	296
19.....	761	977	598	287	303	360	2,640	1,310	625	590	264	308
20.....	754	836	602	277	306	360	2,460	1,310	615	567	260	292
21.....	761	849	590	280	313	360	2,320	1,310	610	544	256	276
22.....	735	762	565	280	306	360	2,200	1,260	590	520	256	268
23.....	693	762	540	274	309	356	2,040	1,230	576	504	272	272
24.....	723	573	524	280	313	364	2,020	1,190	562	516	280	264
25.....	794	635	512	284	309	411	1,870	1,180	585	504	292	268
26.....	800	569	484	287	326	488	1,800	1,130	576	480	292	276
27.....	675	698	468	296	360	536	1,740	1,120	558	472	288	268
28.....	800	805	445	300	360	548	1,670	1,090	558	452	300	264
29.....	794	792	415	300	-	565	1,630	1,060	540	432	296	272
30.....	780	814	381	303	-	1,060	1,590	950	520	420	292	284
31.....	820	-	360	306	-	2,070	-	929	-	412	300	-
Mean	747	811	589	296	314	466	3,410	1,320	664	521	306	270
Per sq. mi.	0.012	0.013	0.009	0.005	0.005	0.007	0.055	0.021	0.011	0.008	0.005	0.004
Acre-feet	45,960	48,240	36,200	18,220	17,420	28,650	203,000	81,240	39,510	32,040	18,830	16,090

The Year.....Discharge: Daily - Maximum 8 April, 6,650 (elevation 846.02)
 - Minimum 11 September, 236 (elevation 839.34)
 Mean 808; Per Square Mile 0.013
 Runoff: Acre-feet 585,100; Depth in inches on drainage area 0.174

b - Ice conditions 10 November to 5 April.

e - Estimated.

ASSINIBOINE RIVER AT HEADINGLEY - STATION No. 5MJ₁

Location: Lat. 49° 52' 09", long. 97° 24' 10", in river lot 16, Parish of Headingley, Manitoba, at traffic bridge, one-half mile south of Canadian Pacific Railway Station. Drainage Area: 62,510 square miles. Gauge: Recording; elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. Measurement of Discharge: From bridge. Period of Record: April 1913 to date. Average Discharge: (45 years) - 1,710 cfs. Extremes Recorded: Daily - Maximum, 27 April 1916, 21,700 cfs (elevation 769.47 ft.), Minimum, 11 December 1936, 20 cfs. Remarks: Records good during open-water periods; fair during ice periods. Minimum flow occurred during period of channel improvement work at St. François Xavier.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	780	850	714	358	279	339	810	1,600	1,030	619	423	302
2.....	770	845	742	328	282	354	1,880	1,580	978	580	407	298
3.....	755	830	755	313	289	365	3,150	1,550	961	570	390	298
4.....	760	825	710	299	292	365	3,470	1,480	926	706	386	298
5.....	770	825	660	289	299	365	3,880	1,450	891	938	386	298
6.....	765	840	636	279	303	392	7,830	1,410	868	816	386	298
7.....	750	855	652	272	306	400	7,370 ^b	1,400	851	740	366	287
8.....	755	850	665	272	306	392	5,830	1,400	816	740	346	277
9.....	780	705	675	279	306	384	6,260	1,410	787	706	339	270
10.....	820	710	695	286	310	380	6,780	1,420	781	648	327	266
11.....	850	568	700	292	317	388	6,260	1,420	746	597	324	260
12.....	860	648 ^b	700	296	321	388	5,400	1,420	752	554	316	260
13.....	860	710	700	289	321	384	4,800	1,410	746	549	320	260
14.....	855	742	695	282	324	384	4,310	1,390	735	575	312	246
15.....	860	738	695	282	321	388	3,880	1,380	729	619	309	243
16.....	855	835	685	275	324	388	3,590	1,370	740	580	302	246
17.....	845	865	680	272	321	388	3,380	1,360	740	586	302	243
18.....	850	930	670	266	317	392	3,190	1,340	729	636	298	253
19.....	855	830	660	259	321	392	3,000	1,310	717	653	291	284
20.....	855	830	644	253	321	388	2,800	1,290	682	636	277	294
21.....	855	870	636	253	321	384	2,600	1,290	665	608	270	294
22.....	845	930	628	250	328	380	2,380	1,290	659	586	266	298
23.....	830	890	608	246	332	380	2,250	1,280	642	564	270	298
24.....	815	855	592	253	343	384	2,120	1,260	619	544	270	284
25.....	815	710	572	256	343	388	1,960	1,200	602	523	280	270
26.....	825	644	536	256	336	396	1,880	1,180	602	518	291	263
27.....	845	548	516	256	336	400	1,810	1,160	608	499	294	263
28.....	855	540	476	259	332	424	1,730	1,140	619	485	298	263
29.....	860	500	440	259	-	496	1,660	1,120	608	471	305	266
30.....	855	596	408	262	-	600	1,650	1,100	586	449	305	260
31.....	845	-	380	272	-	675	-	1,070	-	432	305	-
Mean	822	764	630	276	316	404	3,600	1,340	747	604	321	275
Per sq. mi.	0.013	0.012	0.010	0.004	0.005	0.006	0.058	0.021	0.012	0.010	0.005	0.004
Acre-feet	50,570	45,450	38,730	16,980	17,560	24,840	214,000	82,270	44,460	37,140	19,760	16,340

The Year.....Discharge: Daily - Maximum 6 April, 7,830
 - Minimum 15 September, 243 (elevation 756.59)
 Instantaneous Maximum 9 p.m., 6 April, 10,000
 Mean 840; Per Square Mile 0.013
 Runoff: Acre-feet 608,100; Depth in inches on drainage area 0.180

b - Ice conditions 12 November to 7 April.

Location: Lat. 51° 50' 13", long. 102° 20' 12", in SW. 1/4 sec. 2, tp. 34, rge. 3, W. 2nd Mer., Saskatchewan, at bridge two miles east of Stenen. Drainage Area: 102 square miles. Gauge: Recording. Measurement of Discharge: From bridge or by wading. Period of Record: March to October, 1957 to date. Extremes Recorded: Daily - Maximum, 26 April 1957, 347 cfs, Minimum, Nil at various times. Remarks: Records fair.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	Nil b	0	0	0	Nil	Nil	Nil	Nil	-	-
2.....	-	-	"	1b	0	0	"	"	"	"	-	-
3.....	-	-	"	2	0	0	"	"	"	"	-	-
4.....	-	-	"	3	0	0	"	"	"	"	-	-
5.....	-	-	"	6	0	0	"	"	"	"	-	-
6.....	-	-	"	9	0	0	"	"	"	"	-	-
7.....	-	-	"	9	1e	0	"	"	"	"	-	-
8.....	-	-	"	8	1e	2	"	"	"	"	-	-
9.....	-	-	"	7	1e	0	"	"	"	"	-	-
10.....	-	-	"	7	1e	0	"	"	"	"	-	-
11.....	-	-	"	6	0	0	"	"	"	"	-	-
12.....	-	-	"	6	0	0	"	"	"	"	-	-
13.....	-	-	"	5	0	0	"	"	"	"	-	-
14.....	-	-	"	5	0	0	"	"	"	"	-	-
15.....	-	-	"	4	0	0	"	"	"	"	-	-
16.....	-	-	"	4	0	0	"	"	"	"	-	-
17.....	-	-	"	3	0	0	"	"	"	"	-	-
18.....	-	-	"	3	0	0	"	"	"	"	-	-
19.....	-	-	"	2	0	0	"	"	"	"	-	-
20.....	-	-	"	2	0	0	"	"	"	"	-	-
21.....	-	-	"	2	0	0	"	"	"	"	-	-
22.....	-	-	"	1	0	0	"	"	"	"	-	-
23.....	-	-	"	1	0	0	"	"	"	"	-	-
24.....	-	-	"	0	0	0	"	"	"	"	-	-
25.....	-	-	Nil	0	0	0	"	"	"	"	-	-
26.....	-	-	0	0	0	0	"	"	"	"	-	-
27.....	-	-	0	0	0	0	"	"	"	"	-	-
28.....	-	-	0	0	0	0	"	"	"	"	-	-
29.....	-	-	0	0	0	0	"	"	"	"	-	-
30.....	-	-	0	0	0	0	"	"	Nil	"	-	-
31.....	-	-	0	-	0	-	Nil	Nil	-	Nil	-	-
Mean	-	-	0.0	3.2	0.1	0.1	Nil	Nil	Nil	Nil	-	-
Per sq. mi.	-	-	0.000	0.031	0.001	0.001	Nil	Nil	Nil	Nil	-	-
Acre-feet	-	-	0	190	8	2	Nil	Nil	Nil	Nil	-	-

The Period.....Discharge: Daily - Maximum 6 and 7 April, 9
 (245 days) - Minimum at various times, Nil
 Mean 0.4; Per Square Mile 0.004
 Runoff: Acre-feet 200; Depth in inches on drainage area 0.037

b - Ice conditions 1 March to 2 April.

WHITESAND RIVER NEAR SHEHO - STATION No. 5MB₄

Location: Lat. 51° 35' 08", long. 103° 00' 35", in NW. 1/4 sec. 11, tp. 30, rge. 8, W. 2nd Mer., Saskatchewan, at traffic bridge, eight miles east of Sheho. Drainage Area: 317 square miles. Gauge: Recording. Measurement of Discharge: From bridge or by wading. Period of Record: March to October, 1957 to date. Extremes Recorded: Daily - Maximum, 21 and 22 April 1957, 243 cfs, Minimum, Nil at various times. Remarks: Records fair.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	0b	0	4	0	Nil	Nil	Nil	Nil	-	-
2.....	-	-	0	1	2	0	"	"	"	"	-	-
3.....	-	-	0	3	2	0	"	"	"	"	-	-
4.....	-	-	0	4	3	0	"	"	"	"	-	-
5.....	-	-	0	4	3	0	"	"	"	"	-	-
6.....	-	-	0	3	2	0	"	"	"	"	-	-
7.....	-	-	0	3	0	0	"	"	"	"	-	-
8.....	-	-	0	3b	1	0	"	"	"	"	-	-
9.....	-	-	0	2	0	0	"	"	"	"	-	-
10.....	-	-	0	2	0	0	"	"	"	"	-	-
11.....	-	-	0	1	0	0	"	"	"	"	-	-
12.....	-	-	0	1	1	0	"	"	"	"	-	-
13.....	-	-	0	1	0	0	"	"	"	"	-	-
14.....	-	-	0	1	0	0	"	"	"	"	-	-
15.....	-	-	0	1	0	0	"	"	"	"	-	-
16.....	-	-	0	0	0	0	"	"	"	"	-	-
17.....	-	-	0	0	0	0	"	"	"	"	-	-
18.....	-	-	0	0	0	0	"	"	"	"	-	-
19.....	-	-	0	0	0	0	"	"	"	"	-	-
20.....	-	-	0	0	0	0	"	"	"	"	-	-
21.....	-	-	0	0	0	0	"	"	"	"	-	-
22.....	-	-	0	0	0	0	"	"	"	"	-	-
23.....	-	-	0	0	0	0	"	"	"	"	-	-
24.....	-	-	0	2	0	0	"	"	"	"	-	-
25.....	-	-	0	6	0	0	"	"	"	"	-	-
26.....	-	-	0	5	0	0	"	"	"	"	-	-
27.....	-	-	0	5	0	0	"	"	"	"	-	-
28.....	-	-	0	4	0	0	"	"	"	"	-	-
29.....	-	-	0	4	0	0	"	"	"	"	-	-
30.....	-	-	0	2	0	0	"	"	Nil	"	-	-
31.....	-	-	0	-	0	-	Nil	Nil	-	Nil	-	-
Mean	-	-	0	1.9	0.6	0.0	Nil	Nil	Nil	Nil	-	-
Per sq. mi.	-	-	0	0.006	0.002	0.000	Nil	Nil	Nil	Nil	-	-
Acre-feet	-	-	0	115	36	0	Nil	Nil	Nil	Nil	-	-

The Period.....Discharge: Daily - Maximum 25 April, 6 (elevation 1,657.73)

(245 days) - Minimum at various times, Nil

Mean 0.3; Per Square Mile 0.001

Runoff: Acre-feet 151; Depth in inches on drainage area 0.009

b - Ice conditions 1 March to 8 April.

Location: Lat. 51° 38' 08", long. 102° 22' 13", in NE. 1/4 sec. 28, tp. 30, rge. 3, W. 2nd Mer., Saskatchewan, at dam, two and one-quarter miles east of Canora. Drainage Area: 3,113 square miles. Gauge: Staff; elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. Measurement of Discharge: From bridge and by wading. Period of Record: Mainly open water 1943 to date. Extremes Recorded: Daily - Maximum, 26 April 1948, 5,800 cfs (elevation 1,549.47 ft.). Minimum, Nil at various times. Remarks: Records good. Data for open water 1941 and 1942 were obtained near Kamsack, Station No. 5MB₂.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	0.5e	150	50	8	Nil	Nil	Nil	Nil	-	-
2.....	-	-	0.5	168	50	8	"	"	"	"	-	-
3.....	-	-	0.5	203	50	10	"	"	"	"	-	-
4.....	-	-	0.5	278	48	10	"	"	"	"	-	-
5.....	-	-	0.5	247	44	8	"	"	"	"	-	-
6.....	-	-	0.5	255	40	8	"	"	"	"	-	-
7.....	-	-	0.5	231	40	7	"	"	"	"	-	-
8.....	-	-	0.5	179	40	7	"	"	"	"	-	-
9.....	-	-	0.5	171	36	7	"	"	"	"	-	-
10.....	-	-	0.5	153	34	6	"	"	"	"	-	-
11.....	-	-	0.5	133	30	6	"	"	"	"	-	-
12.....	-	-	0.5	119	27	6	"	"	"	"	-	-
13.....	-	-	0.5	108	29	5	"	"	"	"	-	-
14.....	-	-	0.5	95	27	4	"	"	"	"	-	-
15.....	-	-	0.5	85	27	4	"	"	"	"	-	-
16.....	-	-	0.5	75	25	4	"	"	"	"	-	-
17.....	-	-	0.5	71	21	3	"	"	"	"	-	-
18.....	-	-	0.5	63	18	3	"	"	"	"	-	-
19.....	-	-	0.5	63	15	3	"	"	"	"	-	-
20.....	-	-	0.5	63	14	2	"	"	"	"	-	-
21.....	-	-	1.0	61	14	2	"	"	"	"	-	-
22.....	-	-	2.0	59	15	2	"	"	"	"	-	-
23.....	-	-	4.0	53	15	2	"	"	"	"	-	-
24.....	-	-	6.0	53	15	2	"	"	"	"	-	-
25.....	-	-	8.0	53	13	2	"	"	"	"	-	-
26.....	-	-	10.0	53	13	2	"	"	"	"	-	-
27.....	-	-	12.0	50	10	1	"	"	"	"	-	-
28.....	-	-	15.0e	48	10	1	"	"	"	"	-	-
29.....	-	-	18.0	46	7	0	"	"	"	"	-	-
30.....	-	-	57	44	7	0	"	"	Nil	"	-	-
31.....	-	-	127	-	8	-	Nil	Nil	-	Nil	-	-
Mean	-	-	8.7e	114	25.5	4.4	Nil	Nil	Nil	Nil	-	-
Per sq. mi.	-	-	0.003	0.037	0.008	0.001	Nil	Nil	Nil	Nil	-	-
Acre-feet	-	-	536	6,800	1,570	264	Nil	Nil	Nil	Nil	-	-

The Period..... Discharge: Daily - Maximum 4 April 278 (elevation 1,542.25)
 (245 days) - Minimum at various times Nil

Mean 18.9; Per Square Mile 0.006

Runoff: Acre-feet 9,170; Depth in inches on drainage area 0.054

e - Estimated 1 to 28 March.

YORKTON CREEK NEAR EBENEZER - STATION No. 5MB₁

Location: Lat. 51° 22' 14", long. 102° 30' 06", Saskatchewan, at bridge two miles west of Ebenezer. Drainage Area: 949 square miles. Gauge: Staff. Measurement of Discharge: From bridge or by wading. Period of Record: Mainly open water 1941 to date. Extremes Recorded: Daily - Maximum, 26 April 1948, 1,680 cfs, Minimum, Nil at various times. Remarks: Records fair.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	0 ^b	18.1	1.4	0.2	0	0	0	0	-	-
2.....	-	-	0	14.5	1.2	0.2	0	0	0	0	-	-
3.....	-	-	0	12.3	1.1	0.1	0	0	0	0	-	-
4.....	-	-	0	10.2	0.9	0.1	0	0	0	0	-	-
5.....	-	-	0	8.4	0.9	0.1	0	0	0	0	-	-
6.....	-	-	0	7.4	0.8	0.1	0	0	0	0	-	-
7.....	-	-	0	6.4	0.5	0.1e	0	0	0	0	-	-
8.....	-	-	0	5.9	0.6	0.1	0	0	0	0	-	-
9.....	-	-	0	5.0	0.4	0.1	0	0	0	0	-	-
10.....	-	-	0	4.2	0.3	0.1	0	0	0	0	-	-
11.....	-	-	0	3.9	0.2	0.1	0	0	0	0	-	-
12.....	-	-	0	3.6	0.2	0.1	0	0	0	0	-	-
13.....	-	-	0	3.6	0.1	0	0	0	0	0	-	-
14.....	-	-	0	3.6 ^b	0.1	0	0	0	0	0	-	-
15.....	-	-	0	3.6	0.1	0	0	0	0	0	-	-
16.....	-	-	0	3.0	0.1	0	0	0	0	0	-	-
17.....	-	-	0	3.3	0.1e	0	0	0	0	0	-	-
18.....	-	-	0	3.0	0.1	0	0	0	0	0	-	-
19.....	-	-	0	2.7	0.1	0	0	0	0	0	-	-
20.....	-	-	0	2.7	0.1	0	0	0	0	0	-	-
21.....	-	-	0	2.0	0.1	0	0	0	0	0	-	-
22.....	-	-	0	1.4	0.1	0	0	0	0	0	-	-
23.....	-	-	0	1.1	0.1	0	0	0	0	0	-	-
24.....	-	-	0	0.9	0.1	0	0	0	0	0	-	-
25.....	-	-	0	0.8	0.1	0	0	0	0	0	-	-
26.....	-	-	1.0	0.8	0.1	0	0	0	0	0	-	-
27.....	-	-	2.0	0.9	0.1	0	0	0	0	0	-	-
28.....	-	-	10.2	1.1	0.0	0	0	0	0	0	-	-
29.....	-	-	28.2	1.1	0.0	0e	0	0	0	0	-	-
30.....	-	-	25.8	1.4	0.1	0e	0	0	0	0	-	-
31.....	-	-	18.1	-	0.1	-	0	0	-	0	-	-
Mean	-	-	2.8	4.6	0.3	0	0	0	0	0	-	-
Per sq. mi.	-	-	0.003	0.005	0.000	0	0	0	0	0	-	-
Acre-feet	-	-	169	272	20	3	0	0	0	0	-	-

The Period.....Discharge: Daily - Maximum 29 March, 28.2
 (245 days) - Minimum at various times, 0
 Mean 1.0; Per Square Mile 0.001
 Runoff: Acre-feet 464; Depth in inches on drainage area 0.009

b - Ice conditions 1 March to 14 April.

e - Estimated.

LITTLE BOGGY CREEK AT CÔTÉ - STATION No. 5MD₆

99

Location: Lat. 51° 31' 00", long. 101° 46' 45", in NE. 1/4 sec. 16, tp. 29, rge. 31, W. 1st Mer., Saskatchewan, at bridge, one-quarter mile east of Côté. Drainage Area: 60 square miles. Gauge: Recording. Measurement of Discharge: From bridge or by wading. Period of Record: March to October, 1957 to date. Extremes Recorded: Daily - Maximum, 20 April 1957, 288 cfs, Minimum, at various times, 0 cfs. Remarks: Records fair.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	0b	16	14	13	6	4	7	14	-	-
2.....	-	-	0	13	14	12	7	3	6	13	-	-
3.....	-	-	0	13	13	11	6	3	6	14	-	-
4.....	-	-	0	13	13	10	6	3	5	14	-	-
5.....	-	-	0	12	12	9	7	3	5	14	-	-
6.....	-	-	0	12	12	9	9	3	6	13	-	-
7.....	-	-	0	12	12	8	9	3	5	13	-	-
8.....	-	-	0	14	12	8	7	3	5	13	-	-
9.....	-	-	0	16	13	7	6	3	5	14	-	-
10.....	-	-	0	17b	13	7	6	3	5	15	-	-
11.....	-	-	0	18	12	7	6	3	4	15	-	-
12.....	-	-	0	16	12	7	5	2	5	14	-	-
13.....	-	-	0	17	11	7	5	3	8	14	-	-
14.....	-	-	0	18	11	7	6	2	19	14	-	-
15.....	-	-	0	18	11	7	6	2	17	13	-	-
16.....	-	-	0	17	13	7	5	2	12	13	-	-
17.....	-	-	0	17	10	7	6	2	10	13	-	-
18.....	-	-	0	18	9	7	6	3	8	10	-	-
19.....	-	-	0	24	9	8	6	2	9	8	-	-
20.....	-	-	0	21	9	8	5	2	9	9	-	-
21.....	-	-	0	18	9	7	5	2	8	9	-	-
22.....	-	-	0	16	9	7	5	2	9	10	-	-
23.....	-	-	1	15	8	7	4	3	9	13	-	-
24.....	-	-	1	14	9	6	5	3	9	13	-	-
25.....	-	-	1	14	10	6	5	4	10	14	-	-
26.....	-	-	0	13	10	6	6	4	10	12	-	-
27.....	-	-	0	13	12	6	6	4	11	11	-	-
28.....	-	-	3.0	12	11	6	6	6	11	12	-	-
29.....	-	-	6.0	11	10	6	6	14	13	12	-	-
30.....	-	-	14	15	10	5	4	23	14	12	-	-
31.....	-	-	17	-	13	-	4	11	-	12	-	-
Mean	-	-	1.4	15.4	11.2	7.6	5.8	4.2	8.7	12.6	-	-
Per sq. mi.	-	-	0.023	0.257	0.187	0.127	0.097	0.070	0.145	0.210	-	-
Acre-feet	-	-	85	918	686	452	359	258	516	774	-	-

The Period....Discharge: Daily - Maximum 19 April, 24 (elevation 1,443.55)
(245 days) - Minimum March, 0

Instantaneous Maximum 4 p.m., 19 April, 25 (elevation 1,443.64)

Mean 8.3; Per Square Mile 0.138

Runoff: Acre-feet 4,050; Depth in inches on drainage area 1.269

b- Ice conditions 1 March to 10 April.

SHELL RIVER NEAR INGLIS - STATION No. 5MD₅

Location: Lat. 50° 57' 19", long. 101° 21' 05", in NW. 1/4 sec. 4, tp. 23, rge. 28, W. 1st Mer., Manitoba, five miles west of Inglis, at bridge on Highway No. 31. Drainage Area: 798 square miles. Gauge: Tape-weight; elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. Measurement of Discharge: From bridge or by wading. Period of Record: Mainly open water 1948 to 1955 and continuous April 1956 to date. Extremes Recorded: Daily - Maximum, 1 May 1948, 1,550 cfs (elevation 1,398.46 ft.), Minimum, 25 January to 4 February 1958, 10 cfs. Remarks: Records good during open-water periods; fair during ice periods. Data for water years 1914 to 1919 and open water 1920 and 1921 were obtained near Assessippi, Station No. 5MD₁.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	37	<u>50</u>	<u>37</u>	<u>23</u>	<u>10</u>	<u>16</u>	98	<u>91</u>	68	43	26	47
2.....	<u>36</u>	<u>50</u>	<u>36</u>	<u>22</u>	<u>10</u>	<u>16</u>	138	<u>91</u>	<u>71</u>	42	24	51
3.....	<u>36</u>	50	36	22	10	16	142	89	<u>71</u>	45	25	58
4.....	36	50	36	21	10	16	163	88	71	45	26	54
5.....	36	50b	35	21	11	16	182	88	70	45	24	51
6.....	38	50	35	20	11	16	201	89	70	49	23	48
7.....	41	50	34	19	11	17	218	91	68	<u>52</u>	21	42
8.....	44	50	34	19	12	17	235	91	63	<u>49</u>	21	35
9.....	45	50	34	18	12	18	270b	89	61	46	20	34
10.....	46	50	34	17	12	18	<u>244</u>	88	59	43	20	33
11.....	47	50	33	16	12	19	162	88	57	41	19	30
12.....	48	50	33	16	12	20	147	83	55	39	19	30
13.....	49	50	33	16	12	21	140	83	54	39	18	<u>29</u>
14.....	50	50	33	15	13	21	136	83	54	36	17	29
15.....	50	50	33	14	13	22	128	82	53	35	17	29
16.....	50	50	33	14	14	22	124	82	52	33	16	29
17.....	50	49	32	14	14	23	124	78	52	31	<u>15</u>	29
18.....	50	49	32	13	14	23	124	74	52	30	<u>15</u>	30
19.....	50	49	32	12	15	24	118	71	51	30	15	30
20.....	50	48	31	12	15	24	116	71	51	30	15	37
21.....	50	48	30	12	15	26	115	70	51	30	15	46
22.....	50	48	29	11	15	26	113	68	51	30	15	47
23.....	50	48	29	11	15	28	113	68	49	28	15	47
24.....	49b	47	28	11	15	29	111	65	48	26	15	47
25.....	49	45	27	<u>10</u>	15	30	107	64	48	<u>25</u>	15	48
26.....	49	44	26	10	15	33	107	66	47	25	16	48
27.....	49	42	26	10	16	36	103	66	46	26	18	51
28.....	49	40	26	10	<u>16</u>	42	98	66	46	28	21	53
29.....	49	38	25	10	-	46	94	65	45	29	26	53
30.....	50b	39	<u>24</u>	10	-	61	<u>91</u>	62	<u>43</u>	29	30	53
31.....	<u>51</u>	-	<u>24</u>	10	-	<u>77</u>	-	<u>65</u>	-	29	<u>39</u>	-
Mean	46.3	47.8	31.3	14.8	13.0	26.4	142	78	56	35.7	20.0	41.6
Per sq. mi.	0.058	0.060	0.039	0.019	0.016	0.033	0.178	0.098	0.070	0.045	0.025	0.052
Acre-feet	2,840	2,840	1,920	910	724	1,620	8,450	4,790	3,330	2,200	1,230	2,480

The Year..... Discharge: Daily - Maximum 9 April, 270
 - Minimum 25 January to 4 February, 10
 Mean 46.1; Per Square Mile 0.058
 Runoff: Acre-feet 33,340; Depth in inches on drainage area 0.784

b - Ice conditions 24 to 30 October and 5 November to 9 April.

BIRDTAIL CREEK NEAR BIRTLE - STATION No. 5ME₃

101

Location: Lat. 50° 31' 50", long. 100° 57' 00", at north boundary of sec. 11, tp. 18, rge. 26, W. 1st Mer., Manitoba, eight miles northeast of Birtle. Drainage Area: 410 square miles. Gauge: Chain. Measurement of Discharge: From bridge or by wading. Period of Record: Mainly open water July 1953 to date. Extremes Recorded: Daily - Maximum, 13 May 1956, 1,090 cfs, Minimum, at various times, 0 cfs. Remarks: Data for water years 1914 to 1917 and open water 1924 to 1928 were obtained at Birtle, Station No. 5ME₂.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	0b	165	27	14	4	3	0	0	-	-
2.....	-	-	0	205	30	14	4	3	0	0	-	-
3.....	-	-	0	258	31	14	4	2	0	0	-	-
4.....	-	-	0	288	31	14	5	2	0	0	-	-
5.....	-	-	0	270	30	13	6	1	0	0	-	-
6.....	-	-	0	244	28	13	7	0	0	0	-	-
7.....	-	-	0	218	30	12	8	0	0	0	-	-
8.....	-	-	0	186	30	12	14	0	0	0	-	-
9.....	-	-	1	102b	29	12	19	0	0	0	-	-
10.....	-	-	1	109	27	13	23	0	0	0	-	-
11.....	-	-	1	104	26	13	24	0	0	0	-	-
12.....	-	-	1	98	25	13	22	0	0	0	-	-
13.....	-	-	1	80	27	14	20	0	0	0	-	-
14.....	-	-	1	71	25	14	18	0	0	0	-	-
15.....	-	-	1	67	26	12	19	0	0	0	-	-
16.....	-	-	1	58	25	9	17	0	0	0	-	-
17.....	-	-	1	54	26	8	15	0	0	0	-	-
18.....	-	-	1	58	22	7	14	0	0	0	-	-
19.....	-	-	1	56	19	8	14	0	0	0	-	-
20.....	-	-	1	52	17	7	12	0	0	0	-	-
21.....	-	-	1	48	15	7	11	0	0	0	-	-
22.....	-	-	2	44	14	7	8	0	0	3	-	-
23.....	-	-	2	40	15	7	7	0	0	4	-	-
24.....	-	-	2	40	16	7	6	0	0	4	-	-
25.....	-	-	2	38	16	7	4	0	0	4	-	-
26.....	-	-	2	36	15	6	5	0	0	5	-	-
27.....	-	-	2	33	15	6	5	0	0	6	-	-
28.....	-	-	2	30	14	6	4	0	0	7	-	-
29.....	-	-	29	31	15	5	3	0	0	8	-	-
30.....	-	-	72	32	14	4	3	0	0	9	-	-
31.....	-	-	116	-	15	-	3	0	-	9	-	-
Mean	-	-	7.9	104	22.4	9.9	10.6	0.4	0.0	1.9	-	-
Per sq. mi.	-	-	0.019	0.254	0.055	0.024	0.026	0.001	0.000	0.005	-	-
Acre-feet	-	-	484	6,180	1,380	591	650	22	0	117	-	-

The Period..... Discharge: Daily - Maximum 4 April 288
 (245 days) - Minimum at various times 0
 Mean 19.4; Per Square Mile 0.047
 Runoff: Acre-feet 9,420; Depth in inches on drainage area 0.432

b - Ice conditions 1 March to 9 April.

Location: Lat. 50° 01' 26", long. 100° 12' 56", in SW. 1/4 sec. 19, tp. 12, rge. 20, W. 1st Mer., Manitoba, at traffic bridge, one and one-half miles east of Rivers. Drainage Area: 1,490 square miles. Gauge: Tape-weight, elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. Measurement of Discharge: From bridge or by wading. Period or Record: Mainly open water 1948 to 1954 and continuous April 1955 to date. Extremes Recorded: Daily - Maximum, 26 June 1956, 2,300 cfs (elevation 1,485.39 ft), Minimum, 10 to 20 September 1958, 0 cfs. Remarks: Records good during open-water periods; fair during ice periods. Data for open water 1944 to 1947 were obtained two miles north of Rivers, Station No. 5MF₁₇.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	43	56	60	36	8	4	631	150	66	45	20	2
2.....	43	70	66	32	8	4	602	150	59	43	19	1
3.....	40	62	72	30	8	5	580	143	56	47e	15	1
4.....	36	64	70	28	7	5	533	146	60	51	16	1
5.....	43	64	68	24	7	5	507b	148	63	47	14	1
6.....	40	54	66	20	7	5	432	155	64	50	12	1
7.....	50	64	64	16	6	6	439	141	63	40	14	2
8.....	52	74b	60	15	6	7	435	143	63	39	12	2
9.....	50	74	58	15	5	8	406	141	73	39	12	1
10.....	50	78	56	16	5	10	400	137	71	60	12	0
11.....	58	82	54	17	5	12	413	135	66	97	11	0
12.....	64	86	54	16	5	14	403	131e	51	110	12	0
13.....	68	80	53	16	5	16	371	128	51	119e	12	0
14.....	64	76	52	15	5	19	342	148	50	128	9	0
15.....	60	72	52	15	5	22	318	130	52	118	7	0
16.....	56	74	51	15	5	45	306	132	46	104	6	0
17.....	58	77	50	14	4	62	281	137	47	85	6	0
18.....	54	80	50	14	4	80	259	112	45e	77	4	0
19.....	54	74	50	14	4	94	248	122	42	76	4	0
20.....	52	68	49	14	4	107	235	116	41	68	2	0
21.....	49	62	49	15	4	109	233	94	41	70	2e	0.5
22.....	50	70	42	15	4	111	225	94	33	63	3e	0.5
23.....	66	78	35	14	4	115	220	92e	32	55	4e	0.5
24.....	70	86	27	13	4	119	207	90	43	52	5	0.5
25.....	70	83	19	11	4	187	196	76	40	51	4	0.5
26.....	68e	80	20	10	4	230	179	74	39	47	3	0.5
27.....	64	78	21	9	4	276	176	74	36	46	2	0.5
28.....	50	71	22	9	4	388	170e	67	31	42	3	0.5
29.....	52e	64	24	9	-	564	164	68	30	41	2	1
30.....	54	56	28	9	-	567	155	66	37	36	2e	1
31.....	56	-	32	9	-	584	-	66	-	25	2	-
Mean	54	72	47.5	16.3	5.2	122	336	116	49.7	64	8.1	0.6
Per sq. mi.	0.036	0.048	0.032	0.011	0.003	0.082	0.226	0.078	0.033	0.043	0.005	0.000
Acre-feet	3,340	4,280	2,920	1,000	288	7,500	19,970	7,150	2,960	3,910	498	36

The Year..... Discharge: Daily - Maximum 1 April 631
- Minimum in September 0
Mean 74; Per Square Mile 0.050
Runoff: Acre-feet 53,850; Depth in inches on drainage area 0.679

b - Ice conditions 8 November to 5 April. e - Estimated.

CYPRESS RIVER NEAR CYPRESS RIVER - STATION No. 5MH₂

103

Location: Lat. 49° 33' 00", long. 99° 04' 30", on north boundary of sec. 8, tp. 7, rge. 12, W. 1st Mer., Manitoba, one-half mile southeast of Cypress River. Drainage Area: 147 square miles. Gauge: Staff. Measurement of Discharge: From bridge or by wading. Period of Record: Gauge heights only during open water 1912 to 1915; daily discharges March to October, 1957 to date. Extremes Recorded: Daily - Maximum, 30 March 1958, 108 cfs, Minimum, at various times, 0 cfs. Remarks: Records good during open-water periods; fair during ice periods.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	0b	100	15.5	1.7	0.8	0.9	0.5	0.8	-	-
2.....	-	-	0	93	9.8	1.7	1.3	0.9	0.5	0.8	-	-
3.....	-	-	0	86	26	1.7	0.9	0.8	0.4	0.6	-	-
4.....	-	-	0	80	18	1.8	3.0	0.9	0.4	0.6	-	-
5.....	-	-	0	54b	15.5	1.7	1.8	0.8	0.6	0.6	-	-
6.....	-	-	0	70	17.5	1.5	1.8	0.6	0.6	0.6	-	-
7.....	-	-	0	55	11.5	1.6	1.4	0.7	0.4	0.6	-	-
8.....	-	-	0	44	9.4	1.5	1.3	0.6	0.4	0.6	-	-
9.....	-	-	0	35	7.4	1.5	1.3	0.7	0.4	0.6	-	-
10.....	-	-	0	28	10.2	1.5	0.9	0.6	0.4	0.6	-	-
11.....	-	-	0	28	9.8	1.3	0.8	0.6	0.4	0.6	-	-
12.....	-	-	0	22	9.4	1.3	0.8	0.4	0.4	0.6	-	-
13.....	-	-	0	16	6.1	1.2	1.8	0.8	0.5	0.6	-	-
14.....	-	-	0	12	7.0	1.3	8.6	0.5	0.4	0.6	-	-
15.....	-	-	0	9.4	7.0	1.2	6.4	0.5	0.4	0.6	-	-
16.....	-	-	0	7.0	6.4	1.3	4.3	0.4	0.4	0.6	-	-
17.....	-	-	0	6.4	4.9	1.3	10.6	0.4	0.4	0.6	-	-
18.....	-	-	0	6.1	4.0	1.2	5.8	0.4	0.4	0.6	-	-
19.....	-	-	0	5.5	3.8	1.2	3.4	0.3	0.4	0.6	-	-
20.....	-	-	0	6.4	3.4	1.0	1.9	1.0	0.4	0.6	-	-
21.....	-	-	0	5.8	2.6	1.0	3.2	0.8	0.4	0.6	-	-
22.....	-	-	0	5.5	2.8	1.0	1.8	0.6	0.4	0.8	-	-
23.....	-	-	4	5.5	2.4	1.2	1.3	1.0	0.4	0.8	-	-
24.....	-	-	16	6.4	1.9	2.2	7.8	0.8	0.4	0.6	-	-
25.....	-	-	34	5.8	1.9	1.6	1.9	0.7	0.6	0.6	-	-
26.....	-	-	55	4.3	2.4	1.3	1.8	0.6	0.6	0.6	-	-
27.....	-	-	75	4.0	2.0	0.9	1.6	0.5	0.5	0.7	-	-
28.....	-	-	94	4.3	2.0	0.9	2.4	0.6	0.5	0.6	-	-
29.....	-	-	74	24	2.4	0.9	1.4	0.8	1.2	0.6	-	-
30.....	-	-	108	19	2.2	1.0	1.1	0.7	0.8	0.6	-	-
31.....	-	-	103	-	1.9	-	0.9	0.6	-	0.6	-	-
Mean	-	-	18.2	28.3	7.3	1.4	2.7	0.7	0.5	0.6	-	-
Per sq. mi.	-	-	0.124	0.192	0.050	0.010	0.018	0.005	0.003	0.004	-	-
Acre-feet	-	-	1,120	1,680	451	80	167	41	29	39	-	-

The Period..... Discharge: Daily - Maximum 30 March 108
 (245 days) - Minimum 1 to 22 March 0
 Mean 7.4; Per Square Mile 0.050
 Runoff: Acre-feet 3,610; Depth in inches on drainage area 0.461

b - Ice conditions 1 March to 5 April.

QU'APPELLE RIVER ABOVE EYEBROW LAKE - STATION No. 5JG¹⁰

Location: Lat. 50° 48' 50", long. 106° 17' 15", in SE. 1/4 sec. 25, tp. 23, rge. 3, W. 3rd Mer., Saskatchewan, about eight miles north of Tugaskie and about three miles below mouth of Ridge Creek. Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: March to October, 1958. Extremes Recorded: Daily - Maximum, 28 March 1958, 310 cfs, Minimum, at various times, 0.0 cfs; Instantaneous Maximum, 6 p.m., 28 March 1958, 328 cfs. Remarks: Records fair. Discharge affected by pump diversion from South Saskatchewan River since 1958.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
1.....	-	-	1b	76x	4e	0.7	0.6	4.5	0.5	99	-	-	
2.....	-	-	1	67		0.9	0.5	1.2	0.4	96	-	-	
3.....	-	-	1	58x		1.0	0.4	0.8	0.3	91	-	-	
4.....	-	-	1	43		0.9	0.3	0.6	0.3	96	-	-	
5.....	-	-	1	29		0.7	65	0.6	0.3	96	-	-	
6.....	-	-	1	14x	0.5e	0.6	87	0.9	0.3	93	-	-	
7.....	-	-	1	15b		0.5	91	0.6	0.3	94	-	-	
8.....	-	-	1	15.2x		0.4	90	0.4	34.8	90	-	-	
9.....	-	-	1	14.2e		0.4	93	0.3	91	87	-	-	
10.....	-	-	1	13.2x		0.4	94	0.2	89	87	-	-	
11.....	-	-	1	11.6e	2e	0.4	40.0	0.1	84	31.2	-	-	
12.....	-	-	1	10.1x		0.5	10.0	0.1	88	4.8	-	-	
13.....	-	-	1	8e		0.4	38.7	0.1	83	2.0	-	-	
14.....	-	-	1			0.3	48.2	0.1	79	1.4	-	-	
15.....	-	-	1			0.4	45.2	0.1	87	1.3	-	-	
16.....	-	-	0			0.5	43.0	0.1	91	1.2	-	-	
17.....	-	-	0	5.5x	2e	0.4	55	0.1	90	1.1	-	-	
18.....	-	-	0			0.4	46.7	0.1	92	1.1	-	-	
19.....	-	-	0			0.4	47.5	0.1	94	1.0	-	-	
20.....	-	-	0			0.3	46.0	0.1	89	0.9	-	-	
21.....	-	-	0			0.3	46.0	0.1	91	0.9	-	-	
22.....	-	-	0	5e	0.5	0.3	46.7	0.1	93	0.9	-	-	
23.....	-	-	0			1.0	0.3	47.5	0.1	97	0.9	-	-
24.....	-	-	0			1.0	0.3	48.2	0.2	98	0.8	-	-
25.....	-	-	0			0.8	0.2	60	0.1	94	0.8	-	-
26.....	-	-	138			0.9	0.2	48.2	0.2	96	0.8	-	-
27.....	-	-	289	0.7	0.2	48.2	0.2	92	0.7	-	-		
28.....	-	-	310	0.4	15.9	46.7	0.3	99	0.8	-	-		
29.....	-	-	255	0.5	5.3	49.5	0.4	103	0.8	-	-		
30.....	-	-	169	0.5	1.2	59	0.4	98	0.8	-	-		
31.....	-	-	94	-	0.5	-	27.0	0.4	-	0.7	-	-	
Mean	-	-	41.0	16.1e	1.51e	1.16	47.4	0.44	68.5	31.7	-	-	
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-	
Acre-feet	-	-	2,520	960	93	69	2,910	27	4,080	1,950	-	-	

The Period..... Discharge: Daily - Maximum 28 March, 310
 (245 days) Minimum 16 to 25 March, 0
 Instantaneous Maximum 6 p.m., 28 March, 328
 Mean 25.9
 Runoff: Acre-feet 12,610

b - Ice conditions 1 March to 7 April.

e - Estimated.

x - Manual gauge readings.

Location: Lat. 50° 47', long. 105° 50', in NE. 1/4 sec. 16, tp. 21, rge. 28, W. 2nd Mer., Saskatchewan, about eight miles north of Keeler and eleven miles above Buffalo Pound Lake. Drainage Area: 932 square miles. Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: October 1935, April to June 1936 and March to October, 1944 to date. Records were obtained by manual gauges in SW. 1/4 sec. 21 in 1935 and 1936 and in SE. 1/4 sec. 20 from 1944 to June 1955 and at present location subsequent to June 1955. Records for 1935 and 1936 were published under the title "near Keeler". Extremes Recorded: Daily - Maximum, 15 April 1950, 1,210 cfs (revised), Minimum, Nil at various times. Revisions: 1946-47, W.R.P. 113. Remarks: Records fair. Discharge affected by pump diversion from South Saskatchewan River since 1958 and control at Eyebrow Lake on some occasions.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	51 ^b	449	38.7	0.1	Nil	22.5	0.5	109	-	-
2.....	-	-	26	376 ^b	24.9	0.1	"	23.7	0.4	103	-	-
3.....	-	-	60	308	4.8	0.1	"	27.6	0.3	110	-	-
4.....	-	-	26	246	3.2	0.1	"	29.7	0.3	117	-	-
5.....	-	-	15	228	3.4	0.1	"	14.7	0.2	111	-	-
6.....	-	-	9	216	1.5	0.0	"	50	0.1	86	-	-
7.....	-	-	3	185	1.2	0.0	"	58	0.1	90	-	-
8.....	-	-	2	154	1.1	0.0	"	23.1	0.0	84	-	-
9.....	-	-	1	135	1.0	0.0	"	6.7	0.0	93	-	-
10.....	-	-	1	142	0.9	0.0	"	2.8	0.0	129	-	-
11.....	-	-	1	134	0.8	Nil	"	1.5	0.0	86	-	-
12.....	-	-	1	109	0.8	"	"	1.2	Nil	76	-	-
13.....	-	-	7	99	0.7	"	"	1.1	Nil	64	-	-
14.....	-	-	13	75	0.8	"	"	0.9	Nil	84	-	-
15.....	-	-	19	69	14.1	"	44.2	0.8	Nil	75	-	-
16.....	-	-	15	55	4.8	0.0	37.1	0.7	42.7	72	-	-
17.....	-	-	11	39.5	1.6	0.0	19.5	0.6	45.6	71	-	-
18.....	-	-	6	55	1.0	0.0	18.3	0.7	23.1	62	-	-
19.....	-	-	2	42.9	8.5	0.0	33.9	0.7	26.9	37.5	-	-
20.....	-	-	2	67	7.5	0.0	25.5	0.6	58	30.5	-	-
21.....	-	-	1	35.5	2.6	0.0	19.1	0.5	82	41.1	-	-
22.....	-	-	1	10.5	1.2	0.0	36.3	0.5	79	48.2	-	-
23.....	-	-	1 ^x	4.5	0.9	0.0	36.3	0.4	61	34.6	-	-
24.....	-	-	21	2.6	0.8	Nil	41.1	0.4	61	15.9	-	-
25.....	-	-	41	8.5	0.6	"	56	0.4	65	6.7	-	-
26.....	-	-	298	7.5	0.5	"	50	0.4	66	16.4	-	-
27.....	-	-	633	3.9	0.4	"	34.7	0.4	85	12.0	-	-
28.....	-	-	820	3.7	0.3	"	31.1	0.5	76	4.8	-	-
29.....	-	-	549	54	0.2	"	52	0.8	84	2.4	-	-
30.....	-	-	393	29.7	0.1	"	42.0	0.6	115	1.7	-	-
31.....	-	-	445	-	0.1	-	33.9	0.6	-	1.6	-	-
Mean	-	-	112	111	4.16	0.02	19.7	8.81	32.4	60.5	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	6,890	6,630	256	1.0	1,210	542	1,930	3,720	-	-

The Period..... Discharge: Daily - Maximum 28 March, 820
 (245 days) - Minimum at various times, Nil
 Instantaneous Maximum 1 a.m., 28 March, 911
 Mean 43.6
 Runoff: Acre-feet 21,180

b - Ice conditions 1 March to 2 April.

x - Staff gauge readings 1 to 23 March.

QU'APPELLE RIVER BELOW JUNCTION MOOSEJAW CREEK - STATION No. 5JG₇

Location: Lat. 50° 34' 40", long. 105° 16' 00", in SE. 1/4 sec. 4, tp. 19, rge. 24, W. 2nd Mer., Saskatchewan, near traffic bridge about four miles below Buffalo Pound Lake and about one mile below mouth of Moosejaw Creek. Drainage Area: 4,675 square miles. Gauge: Recording. Measurement of Discharge: From bridge or by wading. Period of Record: March to October, 1944 to date. Recorder established in 1957 to replace former manual gauge at same site. Extremes Recorded: Daily - Maximum (Regulated) 22 April 1956, 2,180 cfs, Minimum, Nil at various times. Revisions: Meandischarge for March 1947 has been corrected to 7.7 cfs. Remarks: Records fair. Discharge affected by regulation at Buffalo Pound Lake and at control dam about two miles upstream from station and below confluence with Moosejaw Creek.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	8 _x	120	40.7	4.1	1.4	0.9	2.8	0.0	-	-
2.....	-	-	12	95	39.1	4.4	1.4	0.9	<u>2.6</u>	<u>0.1</u>	-	-
3.....	-	-	11	133	41.0	4.8	1.6	0.9	2.5	0.1	-	-
4.....	-	-	9	273	<u>30.5</u>	5.0	1.6	0.9	2.3	0.1	-	-
5.....	-	-	8	424b	33.4	5.6	2.1	1.0	2.1	0.1	-	-
6.....	-	-	7	429	28.5	5.5	2.3	1.0	2.0	0.1	-	-
7.....	-	-	7	410	31.9	4.8	2.1	1.0	1.7	0.1	-	-
8.....	-	-	7	384	29.3	3.8	17.0	1.0	1.6	0.1	-	-
9.....	-	-	8	339	29.0	3.1	<u>27.6</u>	0.9	1.1	0.1	-	-
10.....	-	-	9	289	26.8	3.6	<u>4.0</u>	0.9	0.8	0.1	-	-
11.....	-	-	9	235	20.7	3.5	1.8	0.7	0.8	0.1	-	-
12.....	-	-	8	168	15.2	2.4	1.6	0.9	0.8	0.1	-	-
13.....	-	-	6	140	41.0	3.2	2.6	1.0	0.6	0.1	-	-
14.....	-	-	6	152	24.7	2.8	6.3	5.4	0.6	0.1	-	-
15.....	-	-	5	138	11.7	2.9	3.1	<u>11.3</u>	0.6	0.1	-	-
16.....	-	-	5	142	10.6	3.7	2.6	0.8	0.3	0.0	-	-
17.....	-	-	3	148	31.0	4.5	2.2	0.8	0.2	0.2	-	-
18.....	-	-	2	134	31.8	4.4	3.3	0.8	0.2	0.2	-	-
19.....	-	-	<u>2</u>	151	11.5	4.7	2.4	<u>0.6</u>	0.2	0.2	-	-
20.....	-	-	2	119	6.8	4.1	2.1	<u>0.7</u>	0.2	0.2	-	-
21.....	-	-	2	101	6.5	5.2	1.7	0.8	0.2	0.2	-	-
22.....	-	-	2	92	6.3	6.3	1.6	0.9	0.1	0.2	-	-
23.....	-	-	2	93	5.5	<u>5.1</u>	1.4	1.0	0.1	0.3	-	-
24.....	-	-	3	94	7.1	3.6	1.2	0.8	0.0	0.3	-	-
25.....	-	-	8 _x	82	6.2	3.4	1.2	0.7	<u>0.0</u>	0.3	-	-
26.....	-	-	38	74	11.1	3.3	1.2	0.7	0.0	0.3	-	-
27.....	-	-	145	78	8.2	2.9	1.2	1.3	0.0	0.3	-	-
28.....	-	-	275 _c	106	4.5	2.7	1.2	1.7	0.0	<u>0.4</u>	-	-
29.....	-	-	278	75	4.0	1.8	1.2	2.1	0.0	<u>0.4</u>	-	-
30.....	-	-	<u>223</u>	<u>70</u>	4.2	<u>1.6</u>	1.1	2.0	0.0	0.4	-	-
31.....	-	-	186	-	4.4	-	<u>1.0</u>	2.8	-	0.4e	-	-
Mean	-	-	41.8	176	19.5	3.89	3.33	1.52	0.81	0.18	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	2,570	10,490	1,200	232	204	94	48	11	-	-

The Period..... Discharge: Daily - Maximum 6 April, 429
 (245 days) - Minimum at various times, 0.0
 Instantaneous Maximum 1 p.m., 5 April, 437
 Mean 30.5
 Runoff: Acre-feet 14,850

b - Ice conditions 1 March to 5 April.
 e - Estimated.

x - Wire-weight gauge readings 1 to 25 March.

Location: Lat. 50° 39' 05", long. 104° 52' 15", in SW. 1/4 sec. 33, tp. 19, rge. 21, W. 2nd Mer., Saskatchewan, at traffic bridge in town of Lumsden. Drainage Area: 6,540 square miles. Gauge: Wire-weight. Measurement of Discharge: From bridge or by wading. Period of Record: Continuous May 1911 to May 1923 and mainly March to October, 1928 to 1931 and 1944 to date. Gauge was located at various points near present site prior to 1944. Average Discharge: (11 years) - 87.9 cfs. Extremes Recorded: Daily - Maximum (Regulated), 21 April 1956, 4,190 cfs, Minimum, Nil at various times; Instantaneous Maximum (Regulated) at noon, 21 April 1956, 4,210 cfs. Revisions: Drainage area, W.R.P. 40 and 62; 1913 records in 1916 Report; mean discharge as shown for May 1931 in W.R.P. 68 is for the first to the fifteenth only. Remarks: Records fair. Discharge affected by regulation at Buffalo Pound Lake. It is known that a high flood occurred in 1904. From pictorial evidence, the maximum discharge was estimated to be about 5,000 cfs.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	19b	295	96	25.6	13.8	10.8	18.8	16.2	-	-
2.....	-	-	16	322	76	25.8	13.3	10.4	14.7	19.6	-	-
3.....	-	-	14	348	52	24.3	12.1	10.2	15.1	16.2	-	-
4.....	-	-	13	332	58	22.5	14.3	10.7	13.6	17.6	-	-
5.....	-	-	12	404	55	20.5	12.5	9.8	13.1	17.0	-	-
6.....	-	-	11	479	46.3	18.8	13.6	9.2	13.7	17.0	-	-
7.....	-	-	11	567	48.3	17.7	14.2	8.9	13.4	17.0	-	-
8.....	-	-	16	582b	47.5	17.0	17.1	10.1	12.4	17.1	-	-
9.....	-	-	14	605	49.2	17.1	14.2	10.2	12.9	16.2	-	-
10.....	-	-	13	572	47.9	16.8	18.2	10.2	12.6	17.0	-	-
11.....	-	-	13	483	50	15.3	26.4	10.5	12.3	16.8e	-	-
12.....	-	-	11	426	46.0	15.4	20.2	10.5	13.2	16.7	-	-
13.....	-	-	12	349	43.6	16.1	16.5	9.8	12.8	16.8	-	-
14.....	-	-	10	261	49.2	16.0	16.6	9.7	13.5	17.0	-	-
15.....	-	-	9	267	58	15.7	16.5	10.5	14.2	16.8	-	-
16.....	-	-	9	246	50	16.4	24.8	11.2	14.6	16.2	-	-
17.....	-	-	9	196	43.3	17.0	18.8	21.0	15.1	16.6	-	-
18.....	-	-	9	219	41.8	16.4	15.7	14.2	15.1	16.0	-	-
19.....	-	-	9	179	49.6	16.6	14.9	11.8	14.8	16.6	-	-
20.....	-	-	9	206	51	16.2	13.6	11.4	14.5	16.6	-	-
21.....	-	-	9	177	44.8	15.8	14.3	10.4	14.4	16.6	-	-
22.....	-	-	8	140	41.8	16.1	13.5	11.2	14.9	16.1	-	-
23.....	-	-	7	126	40.1	16.1	12.5	12.0	15.3	16.0	-	-
24.....	-	-	7	124	40.1	15.4	11.6	11.5	14.8	16.2	-	-
25.....	-	-	8	118	39.1	15.9	12.2	11.5	14.3	16.7	-	-
26.....	-	-	124	107	39.7	14.6	12.2	11.6	15.8	16.2	-	-
27.....	-	-	290	96	39.7	14.3	11.6	11.6	16.4e	17.2	-	-
28.....	-	-	365	92	39.7	13.8	11.5	11.9	17.0	16.6	-	-
29.....	-	-	375	112	38.4	14.0e	10.5	15.7	16.5	17.0	-	-
30.....	-	-	404	106	29.5	14.1	9.8	38.8	16.1	16.0	-	-
31.....	-	-	340	-	26.4	-	10.3e	28.3	-	16.8	-	-
Mean	-	-	70.2	285	47.7	17.2	14.8	12.8	14.5	16.7	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	4,320	16,930	2,930	1,030	907	785	865	1,030	-	-

The Period..... Discharge: Daily - Maximum 9 April, 605
(245 days) - Minimum 23 and 24 March, 7

Mean 59.2

Runoff: Acre-feet 28,800

b - Ice conditions 1 March to 8 April. e - Estimated.
Gauge heights from graph of observed readings 29 August to 1 September.

QU'APPELLE RIVER BELOW CRAVEN DAM - STATION No. 5JK₂

Location: Lat. 50° 42' 20", long. 104° 47' 50", in SW. 1/4 sec. 24, tp. 20, rge. 21, W. 2nd Mer., Saskatchewan, about one-half mile east of Craven and three hundred yards below Craven Dam. Drainage Area: 11,200 square miles. Gauge: Wire-weight. Measurement of Discharge: From cableway or by wading. Period of Record: Mainly March to October, 1944 to 1954 and continuous October 1926 to September 1927 and December 1954 to date. Records for 1926 and 1927 were published under the title "near Craven". Extremes Recorded: Daily - Maximum, (Regulated) 6 May 1955, 1,730 cfs, Minimum, Nil at various times. Revisions: Drainage area, W.R.P. 117; mean discharge for October 1947 has been corrected to 0.4 cfs; 1944 records are published in W.R.P. 101. Remarks: Records fair. Stage records were collected at different site above Craven dam during period 1933 to 1939. These records were published under title "at Craven Dam" or "above Craven Dam" in Water Resources Papers Nos. 71, 75, 82 and 84, but the index in each of these Papers calls this station "near Craven" in error. Discharge at this station is affected by regulated storage in Buffalo Pound and Last Mountain lakes and in the Qu'Appelle River valley.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	75	23.1	19.0	10	11	13	330	26.0	12.2	22.5	9.1	8.1
2.....	70	23.1	17.8	9	12	15	305	25.0	13.2	22.5	8.8	7.9
3.....	72	23.7	16.7	9	12	15	289	154	71	20.9	8.3	6.6
4.....	76	23.1	16.3	9	11	15	308b	30.0	61	20.1	8.1	6.2
5.....	76	23.7	16.3	10	11	14	341	30.0	61	19.3	7.0	6.0
6.....	78	24.3	16.0	9	11	14	319	26.0	58	18.4	5.6	5.6
7.....	76	24.3	15.7	9	11	14	365	24.2	93	18.4	5.5	5.1
8.....	73	23.1	16.3	9	11	14	358	26.0	60	18.4	5.4	4.4
9.....	72	22.6	16.3	9	13	14	307	27.0	42.2	18.4	5.2	4.2
10.....	75	23.7	17.0	9	12	13	295	25.0	38.6	19.3	5.4	3.9
11.....	78	24.9	16.7	9	12	14	294	11.7	37.4	19.3	5.3	3.8
12.....	23.7	23.7	17.8	9	12	14	299	11.7	34.0	18.4	5.1	2.8
13.....	24.3	23.1	17.4	8	12	14	292	9.8	14.2	21.7	5.4	2.6
14.....	24.3	22.6	17.0	9	12	14	292	10.7	12.2	20.1	5.3	1.8
15.....	23.7	36.0	16.3	8	12	14	276	7.9	15.3	20.1	5.4	0.6
16.....	24.9	42.2	16.7	11	12	13	249	7.7	25.0	20.1	5.6	0.5
17.....	24.3	36.0	17.0	12	12	12	223	7.6	27.0	20.1	6.0	0.6
18.....	23.1	30.7	17.0	11	12	12	55	8.1	25.0	20.1	6.6	0.8
19.....	24.3	25.6	16.7	11	12	13	48.4	7.7	26.0	19.3	7.0	0.8
20.....	24.3	24.9	16.7	11	12	14	43.4	8.8	27.0	19.3	7.2	0.8
21.....	23.7	22.6	16.7	11	12	19	35.0	8.3	25.0	18.4	7.2	0.7
22.....	22.6	21.6	16.7	11	12	19	31.0	8.5	29.0	16.3	7.2	0.7
23.....	23.1	22.6	17.0	11	12	18	27.0	9.8	28.0	15.8	7.2	0.8
24.....	22.6	20.7	17.4	11	11	19	23.4	10.1	29.0	14.8	7.9	1.2
25.....	23.1	20.3	17.0	11	14	19	23.4	8.8	20.9	13.7	7.9	1.4
26.....	22.6	20.7	17.8	11	16	27	24.2	7.7	24.2	14.2	7.7	1.7
27.....	23.1	21.2	17.0	11	16	223	27.0	9.5	24.2	12.7	7.9	1.7
28.....	24.3	19.8	14b	11	14	260	30.0	10.4	26.0	11.4	7.7	1.8
29.....	24.3	20.3	13	11	-	265	27.0	11.7	25.0	10.4	7.7	1.6
30.....	24.3	19.8	12	12	-	286	28.0	130	24.2	10.4	7.7	1.5
31.....	22.6	-	10	12	-	298	-	80	-	9.5	8.1	-
Mean	41.7	24.5	16.3	10.1	12.2	55.7	185	25.2	33.6	17.6	6.82	2.87
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	2,570	1,460	1,000	623	678	3,430	11,040	1,550	2,000	1,080	420	171

The Year..... Discharge: Daily - Maximum 7 April, 365
 - Minimum 16 September, 0.5

Mean 35.9

Runoff: Acre-feet 26,020

b - Ice conditions 28 December to 4 April.

Location: Lat. 50° 38' 20", long. 102° 54' 35", on east boundary of SE. 1/4 sec. 21, tp. 19, rge. 7, W. 2nd Mer., Saskatchewan, at highway bridge, six hundred feet below Canadian Pacific Railway dam. Drainage Area: 19,380 square miles. Gauge: Tape-weight. Measurement of Discharge: From bridge or by wading. Period of Record: March 1956 to date. Extremes Recorded: Daily - Maximum, 17 April 1956, 4,640 cfs, Minimum, at various times, 0 cfs. Remarks: Records good during open-water periods; fair during ice periods.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	52	92	8	3	0	1	671	238	6	0	0	5
2.....	51	77	8	3	0	1	685	212	7	0	0	4
3.....	56	73	8	3	0	1	697	182	6	0	0	4
4.....	142	73	8	3	0	1	498	159e	4	0	1	3
5.....	149	73	8	3	0	1	332	135	3	0	1	3
6.....	156	71	8	3	0	1	271	118	3	0	1	3
7.....	157	65	7	3	0	1	246b	105	2	0	2	2
8.....	162	52	7	3	0	1	235	95	2	1	2	2
9.....	154	66	7	3	0	1	229	83	2	1	1	2
10.....	156	59	6	2	0	1	224	78	1	0	1	2
11.....	154	54	6	1	0	1	226	71e	1	1	1	2
12.....	148	49	6	1	0	1	228	64	1	1	1	2
13.....	146	45	6	1	0	2	239	50	1	2	2	4
14.....	143	42	7	1	0	2	255e	44	0	2	2	4
15.....	143	38	6	2	0	2	270	35	0	4	2	4
16.....	140	31	6	1	0	2	281	42	0	4	2	4
17.....	139	24	6	1	0	2	287	38	0	0	2	4
18.....	138	21	6	1	0	2	284	40	0	0	2	4
19.....	137	23	6	1	1	2	312	36	0	0	2	3
20.....	141	21	6	1	1	3	328	33	0	0	2	2
21.....	148b	18	6	1	1	3	340	17	0	0	2	2
22.....	142	14	6	1	1	4	338	17	0	0	3	2
23.....	138	14	5	1	1	5	332	12	0	0	3	1
24.....	135	12	5	1	1	6	320	12	0	0	2	0
25.....	130	11	5	1	2	8	320	10	0	0	2	1
26.....	126	9	5	1	2	17	322	8	0	0	2	6
27.....	143	8	4	1	1	21	314	6	0	0e	3	5
28.....	134	9	4	1	1	48	302e	8	0	0	6	2e
29.....	136	8	4	0	-	271	289	8	0	0	6	0
30.....	123	8	4	0	-	415	274	8	0	0	6	0
31.....	110	-	3	0	-	531	-	6	-	0	5	-
Mean	133	38.7	6.0	1.6	0.4	43.8	332	64	1.3	0.5	2.2	2.7
Per sq. mi.	0.007	0.002	0.000	0.000	0.000	0.002	0.017	0.003	0.000	0.000	0.000	0.000
Acre-feet	8,190	2,300	371	95	24	2,690	19,730	3,910	77	32	133	163

The Year..... Discharge: Daily - Maximum 3 April, 697
 - Minimum at various times, 0
 Mean 52.0; Per Square Mile 0.003
 Runoff: Acre-feet 37,720; Depth in inches on drainage area 0.034

b - Ice conditions 21 October to 7 April.

e - Estimated.

QU'APPELLE RIVER AT TANTALLON - STATION No. 5JM₃

Location: Lat. 50° 31' 58", long. 101° 50' 13", in NW. 1/4 sec. 9, tp. 18, rge. 32, W. 1st Mer., Saskatchewan, at bridge, Tantallon. Drainage Area: 21,400 square miles. Gauge: Tape-weight; elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. Measurement of Discharge: From bridge and by wading. Period of Record: Mainly open water 1919 to 1931 and 1942 to 1949; continuous March 1950 to date. Average Discharge: (8 years) - 463 cfs. Extremes Recorded: Daily - Maximum, 10 May 1955, 8,460 cfs (elevation 1,378.12 ft.), Minimum, Nil at various times. Remarks: Records good during open-water periods; fair during ice periods.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	142	167	90	28	7	9	58	295	20	11	24	6
2.....	141	167	89	24	7	10	57	350	20	12	24	5
3.....	140	166	88	21	7	10	70	366	18	11	22	4
4.....	131	166	87	19	7	10	76	364	16	9	21	3
5.....	122	167	86	17	8	11	80	358	16	8	20	2
6.....	118	166	85	16	8	11	84b	346	16	6	18	2
7.....	115	164	84	15	8	11	97	338	15	10	16	2
8.....	112	163b	83	14	8	12	92	335	14	10	14	2
9.....	111	162	82	13	8	12	76	335	13	10	11	2
10.....	114	162	82	12	8	12	74	324	12	8	8	18
11.....	118	160	81	12	8	13	72	313	11	7	8	20
12.....	123	159	80	11	8	13	57	298	10	6	7	21
13.....	144	158	79	11	8	13	51	287	10	8	6	22
14.....	173	156	79	10	8	13	48	278	10	14	6	21
15.....	166	155b	78	10	8	14	47	262	9	22	5	19
16.....	160	150	77	10	8	14	47	254	8	30	4	20
17.....	158	143	75	10	8	14	46	225	7	30	3	20
18.....	154	136	74	9	8	13	45	212	7	28	2	20
19.....	150	136b	72	9	8	13	43	191	8	23	2	14
20.....	154	125	70	9	8	12	42	186	8	18	2	11
21.....	159	120	66	9	8	11	42	151	7	13	2	11
22.....	163	110	62	9	8	10	40	128	6	10	2	11
23.....	169	105	56	9	9	11	39	84	6	36	2	12
24.....	169	97	52	9	9	12	87	61	5	36	2	12
25.....	170	97	50	8	9	16	154	52	4	38	2	11
26.....	173	96	46	7	9	30	214	45	4	38	2	9
27.....	171	96	43	7	9	102	233	38	4	35	3	8
28.....	170	95	39	7	9	88	249	34	3	32	2	7
29.....	169	94	35	7	-	94	262	31	3	32	4	9
30.....	169	93	34	7	-	80	281	22	3	30	6	11
31.....	167	-	31	7	-	65	-	22	-	28	8	-
Mean	148	138	69	11.8	8.1	24.5	95	212	9.8	19.6	8.3	11.2
Per sq. mi.	0.007	0.006	0.003	0.001	0.000	0.001	0.004	0.010	0.000	0.001	0.000	0.001
Acre-feet	9,110	8,190	4,230	726	448	1,510	5,680	13,060	581	1,210	512	664

The Year..... Discharge: Daily - Maximum 3 May, 366 (elevation 1,367.84)
 - Minimum in August and September 2
 Mean 63; Per Square Mile 0.003
 Runoff: Acre-feet 45,920; Depth in inches on drainage area 0.038

b - Ice conditions 8 to 15 November and 19 November to 6 April.

Location: Lat. 50° 09' 55", long. 104° 57' 00", in SE. 1/4 sec. 16, tp. 14, rge. 22, W. 2nd Mer., Saskatchewan, at traffic bridge about one and one-half miles below mouth of Avonlea Creek. Drainage Area: 1,200 square miles. Gauge: Wire-weight. Measurement of Discharge: From bridge or by wading. Period of Record: Mainly March to June, 1944 to 1952 and March to October, 1953 to date. Extremes Recorded: Daily - Maximum, 23 April 1948, 5,340 cfs, Minimum, Nil at various times. Revisions: 1951, W.R.P. 117. Remarks: Records fair.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	Nil	556	1.0	0.1	0.0	Nil	Nil	Nil	-	-
2.....	-	-	"	500	0.2	0.1	0.0	"	"	"	-	-
3.....	-	-	"	373	0.2	0.1	0.0	"	"	"	-	-
4.....	-	-	"	278	0.1	0.1	0.0	"	"	"	-	-
5.....	-	-	"	207	0.1	0.1	0.0	"	"	"	-	-
6.....	-	-	"	184	0.1	0.1	0.0	"	"	"	-	-
7.....	-	-	"	163	0.1	0.1	0.0	"	"	"	-	-
8.....	-	-	"	128b	0.1	0.1	0.0	"	"	"	-	-
9.....	-	-	"	102	0.1	0.1	0.0	"	"	"	-	-
10.....	-	-	"	97	1.0	0.1	0.0	"	"	"	-	-
11.....	-	-	"	96	0.8	0.1	0.0	"	"	"	-	-
12.....	-	-	"	95	0.7	0.1	0.0	"	"	"	-	-
13.....	-	-	"	88	0.5	0.0	0.0	"	"	"	-	-
14.....	-	-	"	78	0.4	0.0	0.0	"	"	"	-	-
15.....	-	-	"	68	0.3	0.0	0.0	"	"	"	-	-
16.....	-	-	"	56	0.2	0.1	0.0	"	"	"	-	-
17.....	-	-	"	47.3	0.2	0.1	0.0	"	"	"	-	-
18.....	-	-	"	39.4	0.2	0.1	0.0	"	"	"	-	-
19.....	-	-	"	32.8	0.1	0.1	0.0	"	"	"	-	-
20.....	-	-	"	21.8	0.1	0.1	Nil	"	"	"	-	-
21.....	-	-	"	16.7	0.1	0.1	"	"	"	"	-	-
22.....	-	-	"	13.7	0.1	0.1	"	"	"	"	-	-
23.....	-	-	"	10.9	0.1	0.1	"	"	"	"	-	-
24.....	-	-	"	8.1	0.1	0.1	"	"	"	"	-	-
25.....	-	-	" b	6.8	0.1e	0.1	"	"	"	"	-	-
26.....	-	-	"	5.2	0.1e	0.1	"	"	"	"	-	-
27.....	-	-	"	4.6	0.1e	0.1	"	"	"	"	-	-
28.....	-	-	"	3.5	0.1	0.1	"	"	"	"	-	-
29.....	-	-	89	2.7	0.1	0.1	"	"	"	"	-	-
30.....	-	-	390	1.9	0.1	0.1	"	"	"	"	-	-
31.....	-	-	539	-	0.1	-	"	"	-	"	-	-
Mean	-	-	32.8	109	0.25	0.09	0.00	Nil	Nil	Nil	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	2,020	6,520	15	5.4	0.0	Nil	Nil	Nil	-	-

The Period..... Discharge: Daily - Maximum 1 April, 556
(245 days) - Minimum at various times, Nil

Mean 17.6

Runoff: Acre-feet 8,560

b - Ice conditions 25 March to 8 April.

e - Estimated.

MOOSEJAW CREEK ABOVE THUNDER CREEK - STATION No. 5JE₁

Location: Lat. 50° 20' 50", long. 105° 32' 00", in NW. 1/4 sec. 16, tp. 16, rge. 26, W. 2nd Mer., Saskatchewan, at Highway No. 2 crossing about four miles upstream from Mouth of Thunder Creek and two miles south of Moose Jaw. Drainage Area: 1,960 square miles. Gauge: Wire-weight. Measurement of Discharge: From bridge or by wading. Period of Record: Continuous March 1910 to October 1923; mainly March to October, 1924 to 1931, 1933 to 1940 and 1954 to date. Records for period 1910 to 1940 published under title "at McCarthy's Farm". Average Discharge: (13 years) 45.6 cfs. Extremes Recorded: Daily - Maximum, 9 May 1955, 3,730 cfs, Minimum, Nil at various times; Instantaneous Maximum - 9 May 1955 (from high water mark) 3,880 cfs. Revisions: Drainage area, W.R.P. 40; 1911, W.R.P. 117; mean discharge for January 1912 has been corrected to 0.05 cfs; mean discharges for March and April 1914 have been corrected to 1.1 and 66 cfs; mean runoff for March and April 1914 and for the year 1914 have been corrected to 68, 3,927 and 4,734 acre-feet; mean discharges for July and August 1917 have been corrected to 0.91 and 0.10 cfs; runoff for July 1917 and for the year 1917 have been corrected to 56 and 51,968 acre-feet. Remarks: Records fair.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	Nil b	13	5.6	0.9	0.2	Nil	Nil	Nil	-	-
2.....	-	-	"	34	4.9	0.8	0.2	"	"	"	-	-
3.....	-	-	"	505	4.3	0.6	0.1	0.4	"	"	-	-
4.....	-	-	"	675b	3.6	0.7	0.0	0.3	"	"	-	-
5.....	-	-	"	517	3.0	1.1	0.0	0.2	"	"	-	-
6.....	-	-	"	339	2.6	1.0	0.0	0.1	"	"	-	-
7.....	-	-	"	287	2.2	0.9	Nil	Nil	"	"	-	-
8.....	-	-	"	244e	1.8	1.0	"	"	"	"	-	-
9.....	-	-	"	201	1.4	1.0	"	"	"	"	-	-
10.....	-	-	"	166	1.1	1.1	"	"	"	"	-	-
11.....	-	-	"	141	0.8	1.1	"	"	"	"	-	-
12.....	-	-	"	108	0.6	0.9	0.1	"	"	"	-	-
13.....	-	-	"	94	0.8	0.9	0.2	"	"	"	-	-
14.....	-	-	"	94	0.9	0.8	0.7	"	"	"	-	-
15.....	-	-	"	86	1.2	0.9	0.8	"	"	"	-	-
16.....	-	-	"	80	1.1	1.2	1.1	"	"	"	-	-
17.....	-	-	"	74	1.1	1.2	1.0	"	"	"	-	-
18.....	-	-	"	54	0.9	1.1	1.0	"	"	"	-	-
19.....	-	-	"	45.2	0.8	1.0	1.1	"	"	"	-	-
20.....	-	-	"	42.4	0.6	1.0	1.2	"	"	"	-	-
21.....	-	-	"	41.1	0.4e	0.9	0.7	"	"	"	-	-
22.....	-	-	"	32.8	0.1	1.0	0.1	"	"	"	-	-
23.....	-	-	"	27.8	0.3	1.0	Nil	"	"	"	-	-
24.....	-	-	"	21.2	0.5	0.9	0.0	"	"	"	-	-
25.....	-	-	1	17.7	0.4	0.8	Nil	"	"	"	-	-
26.....	-	-	3	14.7	0.4	0.6	"	1.1	"	"	-	-
27.....	-	-	1	11.8	0.3	0.5	"	5.6	"	"	-	-
28.....	-	-	0	10.2	0.3	0.3	"	0.7	"	"	-	-
29.....	-	-	24	9.0	0.5	0.2	"	Nil	"	"	-	-
30.....	-	-	23	7.2	0.6	0.1	"	"	"	"	-	-
31.....	-	-	23	-	0.7	-	"	"	-	"	-	-
Mean	-	-	2.42	133	1.41	0.85	0.27	0.27	Nil	Nil	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	149	7,920	87	51	17	17	Nil	Nil	-	-

The Period.....Discharge: Daily - Maximum 4 April, 675
(245 days) - Minimum at various times, Nil

Mean 17.0

Runoff: Acre-feet 8,240

b - Ice conditions 1 March to 4 April.

e - Estimated.

Location: Lat. 50° 24' 00", long. 105° 23' 50", in SE. 1/4 sec. 5, tp. 17, rge. 25, W. 2nd Mer., Saskatchewan, about six miles east of Moose Jaw and about fifteen miles above confluence with Qu'Appelle River. Drainage Area: 3,390 square miles. Gauge: Recording. Measurement of Discharge: From traffic bridge, cableway or by wading. Period of Record: March to June, 1944 to 1952 and mainly March to October, 1953 to date. Station moved upstream about one mile from former manual gauge site in SE. 1/4 sec. 4 on 16 June 1955 and recorder established. Extremes Recorded: Daily - Maximum, 25 April 1948, 7,080 cfs, Minimum, Nil at various times. Revisions: Mean discharge for June 1948 has been corrected to 17.8 cfs. Remarks: Records fair.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	3b	54	13.8	3.1	1.4	2.4	2.4	2.6	-	-
2.....	-	-	3	119	14.4	3.9	0.7	1.0	1.2	2.6	-	-
3.....	-	-	3	275	13.8	3.1	0.5	0.2	0.9	2.4	-	-
4.....	-	-	3	653	13.3	2.9	1.8	0.2	1.2	2.4	-	-
5.....	-	-	3	662	12.7	3.4	4.8	0.5	1.2	2.4	-	-
6.....	-	-	3	505	12.2	4.2	5.2	0.7	1.7	1.7	-	-
7.....	-	-	3	366	12.7	3.9	4.2	0.6	1.7	1.7	-	-
8.....	-	-	3	286	13.3	3.4	4.2	1.0	1.2	2.0	-	-
9.....	-	-	3	246	12.7	3.6	4.2	1.4	1.1	2.9	-	-
10.....	-	-	3	193	10.5	4.5	4.2	1.0	1.1	2.4	-	-
11.....	-	-	3	119	8.5	3.9	4.2	1.2	1.1	2.4	-	-
12.....	-	-	3	93	8.5	3.6	5.5	1.2	1.2	2.9	-	-
13.....	-	-	3	117	5.9	3.9	5.9	1.8	2.0	3.1	-	-
14.....	-	-	3	93	4.2	4.2	4.8	2.4	1.2	3.6	-	-
15.....	-	-	3	106	4.8	5.2	4.8	2.6	1.1	3.6	-	-
16.....	-	-	3	81	4.8	6.3	3.6	2.2	0.3	3.9	-	-
17.....	-	-	3	81	4.5	5.5	2.9	2.0	0.5	4.2	-	-
18.....	-	-	3	81	3.6	5.5	2.6	2.2	1.1	3.9	-	-
19.....	-	-	3	72	3.4	10.0	2.6	2.2	0.9	3.6	-	-
20.....	-	-	3	60	3.6	6.3	2.6	1.8	1.0	3.1	-	-
21.....	-	-	3	51	3.6	4.8	2.2	1.1	0.9	2.6	-	-
22.....	-	-	3	47.5	3.6	5.9	2.0	0.7	1.4	2.4	-	-
23.....	-	-	3	41.4	2.9	4.8	1.7	0.8	1.4	2.2	-	-
24.....	-	-	5	34.6	1.5	3.9	1.5	1.1	1.8	2.4	-	-
25.....	-	-	37	28.7	0.9	3.1	0.9	1.4	2.2	2.2	-	-
26.....	-	-	94	24.8	0.3	2.6	1.0	2.2	2.0	2.2	-	-
27.....	-	-	242b	22.2	0.2	2.4	3.1	3.4	2.0	2.2	-	-
28.....	-	-	277	19.0	0.7	2.6	2.6	6.7	2.6	1.8	-	-
29.....	-	-	186	16.2	2.4	2.2	2.4	8.5	3.4	2.0	-	-
30.....	-	-	150	11.1	3.1	2.0	2.9	3.4	3.6	2.2	-	-
31.....	-	-	76	-	3.1	-	2.6	2.9	-	2.2e	-	-
Mean	-	-	36.6	152	6.56	4.16	3.02	1.96	1.51	2.64	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	2,250	9,040	404	247	186	121	90	162	-	-

The Period.....Discharge: Daily - Maximum 5 April, 662
 (245 days) - Minimum at various times, 0.2
 Instantaneous Maximum 2 a.m., 5 April, 717
 Mean 25.7
 Runoff: Acre-feet 12,500

b - Ice conditions 1 to 27 March.

e - Estimated.

Location: Lat. 50° 07' 50", long. 104° 00' 30", in NE. 1/4 sec. 32, tp. 13, rge. 15, W. 2nd Mer., Saskatchewan, about thirty-five miles upstream from Waskana Lake and two miles south of Sedley. Drainage Area: 316 square miles. Gauge: Staff. Measurement of Discharge: From bridge or by wading. Period of Record: March to June, 1944 to 1954 and March to October, 1955 to date. Extremes Recorded: Daily - Maximum, 13 April 1956, 1,820 cfs, Minimum, Nil at various times. Revisions: 1944, W.R.P. 113. Remarks: Records fair. Since 1950 the discharge has been affected by a dam near Tyvan, Saskatchewan, about fifteen miles upstream.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	Nil b	204	Nil	Nil	Nil	Nil	Nil	Nil	-	-
2.....	-	-	"	190	"	"	"	"	"	"	-	-
3.....	-	-	"	135	"	"	"	"	"	"	-	-
4.....	-	-	"	85	"	"	"	"	"	"	-	-
5.....	-	-	"	61	"	"	"	"	"	"	-	-
6.....	-	-	"	44.8	"	"	"	"	"	"	-	-
7.....	-	-	"	36.0e	"	"	"	"	"	"	-	-
8.....	-	-	"	27.3	"	"	"	"	"	"	-	-
9.....	-	-	"	26.1	"	"	"	"	"	"	-	-
10.....	-	-	"	23.0	"	"	"	"	"	"	-	-
11.....	-	-	"	19.2	"	"	"	"	"	"	-	-
12.....	-	-	"	16.9	"	"	"	"	"	"	-	-
13.....	-	-	"	14.4	"	"	"	"	"	"	-	-
14.....	-	-	"	13.3	"	"	"	"	"	"	-	-
15.....	-	-	"	3.2	"	"	"	"	"	"	-	-
16.....	-	-	"	1.1	"	"	"	"	"	"	-	-
17.....	-	-	"	1.0	"	"	"	"	"	"	-	-
18.....	-	-	"	0.5	"	"	"	"	"	"	-	-
19.....	-	-	"	0.4	"	"	"	"	"	"	-	-
20.....	-	-	"	0.3	"	"	"	"	"	"	-	-
21.....	-	-	"	0.3	"	"	"	"	"	"	-	-
22.....	-	-	"	0.2	"	"	"	"	"	"	-	-
23.....	-	-	"	0.0	"	"	"	"	"	"	-	-
24.....	-	-	Nil	Nil	"	"	"	"	"	"	-	-
25.....	-	-	0	"	"	"	"	"	"	"	-	-
26.....	-	-	0	"	"	"	"	"	"	"	-	-
27.....	-	-	1	"	"	"	"	"	"	"	-	-
28.....	-	-	10	"	"	"	"	"	"	"	-	-
29.....	-	-	25	"	"	"	"	"	"	"	-	-
30.....	-	-	61	"	"	"	"	"	"	"	-	-
31.....	-	-	127b	-	"	-	"	"	-	"	-	-
Mean	-	-	7.23	30.1	Nil	Nil	Nil	Nil	Nil	Nil	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	444	1,790	Nil	Nil	Nil	Nil	Nil	Nil	-	-

The Period..... Discharge: Daily - Maximum 1 April, 204
 (245 days) - Minimum at various times, Nil
 Mean 4.60
 Runoff: Acre-feet 2,230

b - Ice conditions 1 to 31 March.

e - Estimated.

Location: Lat. 50° 38' 10", long. 104° 54' 35", in SW. 1/4 sec. 30, tp. 19, rge. 21, W. 2nd Mer., Saskatchewan, about one mile above confluence with Qu'Appelle River and one and one-half miles west of Lumsden. Drainage Area: 1,460 square miles. Gauge: Recording. Measurement of Discharge: From bridge or by wading. Period of Record: Mainly March to October, 1945 to date. The station was moved downstream two and one-half miles after the 1948 season. The recorder was established in September 1957 about sixty feet downstream from the former wire-weight gauge site. Extremes Recorded: Daily - Maximum, 24 April 1948, 2,310 cfs, Minimum, Nil at various times. Remarks: Records fair.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	3b	28	19.1e	14.8e	10.0e	12.1e	17.6	18.8	-	-
2.....	-	-	3	171	18.3e	15.1	9.8	12.2	14.5	16.6	-	-
3.....	-	-	3	234	17.4e	14.3e	10.6e	14.0	12.8	15.5	-	-
4.....	-	-	3	232	16.6	13.6e	11.5e	13.7	11.8	15.0	-	-
5.....	-	-	3	229	16.7e	12.8e	12.3e	14.0e	13.0	14.8	-	-
6.....	-	-	3	270b	16.8e	12.0	13.2e	14.3	13.0	14.8	-	-
7.....	-	-	3x	267	16.9e	11.7	14.0	14.0	12.8	14.5	-	-
8.....	-	-	3	247	17.1e	11.5	15.2e	12.5	12.6	13.8	-	-
9.....	-	-	3	237	17.2e	11.3e	16.5e	12.6e	12.4	14.3	-	-
10.....	-	-	3	214	17.3e	11.1e	17.7	12.7e	11.7	14.5	-	-
11.....	-	-	3	208	17.4	11.0e	20.0e	12.8x	12.2	14.5	-	-
12.....	-	-	3	186	17.1e	10.8e	22.4e	13.0	12.6	14.8	-	-
13.....	-	-	3	153	16.8e	10.6e	24.7e	13.6	12.6	15.2	-	-
14.....	-	-	3	138e	16.4e	10.4	27.1e	13.6	13.4	14.5	-	-
15.....	-	-	3	122e	16.1e	12.2	29.4	15.5	13.8	14.5	-	-
16.....	-	-	3	107e	15.7e	12.1e	27.4e	15.7	15.5	14.3	-	-
17.....	-	-	3	91e	15.4e	12.0e	25.4e	15.0	14.8	15.0	-	-
18.....	-	-	3	76e	15.1	12.0e	23.5e	14.8	14.8	15.0	-	-
19.....	-	-	3	60e	14.3	11.9e	21.5	14.5	14.3	15.0	-	-
20.....	-	-	3	44.8	14.4e	11.8e	19.8e	13.8	14.1	14.8	-	-
21.....	-	-	3	42.1e	14.5e	11.7	18.1e	14.1	14.5	13.8	-	-
22.....	-	-	3	39.4e	14.5e	11.5e	16.4e	17.2	14.3	13.6	-	-
23.....	-	-	3	36.7e	14.6e	11.4e	14.7	16.3	13.8	13.8	-	-
24.....	-	-	3	34.0	14.7	11.2e	15.1e	15.2	13.8	14.5	-	-
25.....	-	-	24	28.5e	13.1	11.0e	15.4e	15.5	14.3	14.5	-	-
26.....	-	-	89	23.0	13.1	10.8e	15.8	15.0	14.8	14.8	-	-
27.....	-	-	177	22.5	13.1	10.7e	14.3	14.5	14.8	15.2	-	-
28.....	-	-	155	21.7e	13.4e	10.5e	13.4e	16.9	14.8	14.5	-	-
29.....	-	-	120	20.8e	13.8e	10.3e	12.6e	42.8	15.2	13.8	-	-
30.....	-	-	70	20.0e	14.1e	10.1e	11.7	75	15.2	14.1	-	-
31.....	-	-	40	-	14.5e	-	12.0	31.4	-	15.0	-	-
Mean	-	-	24.1	120	15.7	11.7	17.1	17.7	13.9	14.8	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	1,480	7,150	963	699	1,050	1,090	825	908	-	-

The Period.....Discharge: Daily - Maximum 6 April, 270
 (245 days) - Minimum 1 to 24 March, 3

Mean 29.1

Runoff: Acre-feet 14,160

b - Ice conditions 1 March to 6 April.

e - Estimated.

x - Wire-weight gauge readings 7 March to 11 August.

Location: Lat. 50° 36' 00", long. 104° 49' 00", in NW. 1/4 sec. 11, tp. 19, rge. 21, W. 2nd Mer., Saskatchewan, about four miles southeast of Lumsden and four miles upstream from confluence with Qu'Appelle River. Drainage Area: 175 square miles. Gauge: Staff. Measurement of Discharge: From bridge or by wading. Period of Record: Mainly March to June 1945 to 1951, 1953 and 1954; March to October, 1955 to date; miscellaneous measurements in 1952. Prior to 20 April 1948, records were obtained about four miles upstream. Extremes Recorded: Daily - Maximum, 15 April 1956, 1,470 cfs, Minimum, Nil at various times; Revisions: Total runoff for 1946 is estimated at 180 acre-feet. Remarks: Records fair.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	Nil b	4	0.8e	0.1e	0.1e	0.0	Nil	0.3e	-	-
2.....	-	-	"	6	0.6	0.1	0.1	0.0e	"		-	-
3.....	-	-	"	9	0.6e	0.1e	0.1e	Nil	"		-	-
4.....	-	-	"	18	0.6e	0.1e	0.1	"	"		-	-
5.....	-	-	"	7b	0.5e	0.1	0.1e	"	"		-	-
6.....	-	-	"	13.2	0.5	0.1e	0.2e	"	"		-	-
7.....	-	-	"	12.4e	0.4e	0.1e	0.2	"	"		-	-
8.....	-	-	"	11.5	0.4	0.1	0.2e	"	"		-	-
9.....	-	-	"	10.8	0.4e	0.1e	0.1e	"	0.0e		-	-
10.....	-	-	"	10.8	0.4e	0.0e	0.1	"	0.1		-	-
11.....	-	-	"	8.6	0.3e	0.0e	0.1e	"	0.1e	0.3e	-	-
12.....	-	-	"	6.6	0.3	0.0	0.1	"			-	-
13.....	-	-	"	5.4e	0.2e	0.0e	0.1e	"			-	-
14.....	-	-	"	4.3	0.2	0.0e	0.1	"			-	-
15.....	-	-	"	3.0e	0.2e	0.0e	0.1e	"			-	-
16.....	-	-	"	1.6	0.2e	0.0	0.1e	"			-	-
17.....	-	-	"	2.0e	0.2e	0.0e	0.1	"			-	-
18.....	-	-	"	2.4	0.2	0.1	0.1e	"			-	-
19.....	-	-	"	2.6e	0.2e	0.1e	0.1e	"			-	-
20.....	-	-	"	2.9e	0.1e	0.1e	0.1e	"			-	-
21.....	-	-	"	3.2e	0.1	0.1e	0.1	"	0.2e	0.4	-	-
22.....	-	-	"	3.4	0.1e	0.1	0.1e	"			-	-
23.....	-	-	"	2.5e	0.1e	0.1e	0.1e	"			-	-
24.....	-	-	"	1.6	0.1	0.1	0.1e	"			-	-
25.....	-	-	5	2.0e	0.1e	0.1e	0.1e	"			-	-
26.....	-	-	39	2.4	0.1e	0.1e	0.1	"			-	-
27.....	-	-	33	2.0e	0.1	0.1	0.1e	"			-	-
28.....	-	-	10	1.6e	0.1e	0.1e	0.0e	"			-	-
29.....	-	-	4	1.2	0.1	0.1	0.0	"	0.2		-	-
30.....	-	-	2	1.1	0.1e	0.1e	0.0e	"	0.2e		-	-
31.....	-	-	1	-	0.1	-	0.0e	"	"		-	-
Mean	-	-	3.03	5.44	0.27	0.07	0.10	0.00	0.11e	0.30e	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	186	324	17	4.4	6.0	0.0	6.3e	19e	-	-

The Period.....Discharge: Daily - Maximum 26 March, 39
 (245 days) - Minimum at various times, Nil
 Mean 1.16
 Runoff: Acre-feet 563

b - Ice conditions 1 March to 5 April.

e - Estimated.

Location: Lat. 50° 55', long. 103° 54', in NW, 1/4 sec. 33, tp. 22, rge. 14, W. 2nd Mer., Saskatchewan, about one mile north and two miles west of Lipton and about eight miles above confluence with Qu'Appelle River. Drainage Area: 622 square miles. Gauge: Wire-weight. Measurement of Discharge: From cableway or by wading. Period of Record: Mainly March to October 1941 to date. Prior to 1945, records were obtained in SE, 1/4 sec. 29, tp. 21 and published under the title "near Fort Qu'Appelle". Extremes Recorded: Daily - Maximum, 5 April 1943, 499 cfs, Minimum, Nil at various times. Revisions: 1944 and 1947, W.R.P. 117. Remarks: Records fair. Discharge is affected by minor storage development upstream.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	Nil b	65b	0.5	0.5	0.1e	0.3	0.0e	1.6	-	-
2.....	-	-	"	46.1	0.4	0.5	0.1	0.2	0.0e	1.7	-	-
3.....	-	-	"	34.9	0.4	0.6	0.1	0.2	0.0e	1.7	-	-
4.....	-	-	"	34.0	0.6	0.5	0.1	0.1	0.0e	1.6	-	-
5.....	-	-	"	20.6	0.4	0.5	0.1	0.0	0.0e	0.9	-	-
6.....	-	-	"	14.6	0.3	0.4	0.1	0.0	0.0e	0.6	-	-
7.....	-	-	"	10.7	0.2	0.4	0.1	Nil	0.0e	0.2	-	-
8.....	-	-	"	5.7	4.6	0.4	0.1	"	0.0	0.1	-	-
9.....	-	-	"	4.2	0.4	0.3	0.1	"	0.0	0.1	-	-
10.....	-	-	"	4.0	0.2	0.3	0.0	"	0.0	0.1	-	-
11.....	-	-	"	2.6	3.2	0.2	0.0	"	0.0	0.1	-	-
12.....	-	-	"	2.2	0.7	0.2	0.1	"	0.0	0.1	-	-
13.....	-	-	"	2.0	0.4	0.2	0.2	"	0.0	0.1	-	-
14.....	-	-	"	1.5	0.3	0.1	0.1	"	0.0	0.1	-	-
15.....	-	-	"	1.1	0.2	0.2	0.1	"	0.0	0.1	-	-
16.....	-	-	"	1.2	0.2	0.1	0.1	"	0.0	0.1	-	-
17.....	-	-	"	2.0	0.2	0.1	0.3	"	0.0	0.1	-	-
18.....	-	-	"	4.4	0.1	0.1	0.2	"	0.0	0.1	-	-
19.....	-	-	"	2.8	0.1	0.2	0.1	"	0.0	0.1	-	-
20.....	-	-	"	2.0	0.1	0.2	0.0	"	0.1	0.1	-	-
21.....	-	-	"	1.5	0.1	0.2	0.0	"	0.1	0.2	-	-
22.....	-	-	"	1.2	1.4	0.2e	0.0	"	0.1	0.2	-	-
23.....	-	-	"	1.3	0.8	0.2	0.0	"	0.1	0.2	-	-
24.....	-	-	"	1.2	0.6	0.1	0.0	"	0.1	0.2	-	-
25.....	-	-	Nil	0.9	0.5	0.1	0.0	"	0.0	0.2	-	-
26.....	-	-	10	0.8	0.1	0.5	0.1	"	0.0	0.2	-	-
27.....	-	-	34	0.8	0.7	0.2	0.1	"	0.0	0.2	-	-
28.....	-	-	70	0.9	0.5	0.1	0.0	0.0	1.3	0.2	-	-
29.....	-	-	99	0.8	0.4	0.1	0.0	0.0	1.6	0.2	-	-
30.....	-	-	86	0.7	0.4	0.1e	0.0	0.0	1.6	0.2	-	-
31.....	-	-	72	-	0.3	-	0.4	0.0e	-	0.2	-	-
Mean	-	-	12.0	9.06	0.62	0.26	0.09	0.03	0.17	0.38	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	736	539	38	15	5.4	1.6	9.9	23	-	-

The Period..... Discharge: Daily - Maximum 29 March, 99
(245 days) - Minimum at various times, Nil

Mean 2.82

Runoff: Acre-feet 1,370

b - Ice conditions 1 March to 1 April.

e - Estimated.

Location: Lat. 50° 39' long. 103° 36', in NW. 1/4 sec. 22, tp. 19, rge. 12, W. 2nd Mer., Saskatchewan, about eight miles north and three miles east of Indian Head and one mile above confluence with Qu'Appelle River. Drainage Area: 149 square miles. Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: March to October, 1941 to date. Prior to 25 June 1955, records were obtained by manual gauge about one-half mile up-stream. Extremes Recorded: Daily - Maximum, 14 April 1956, 989 cfs, Minimum, Nil at various times; Instantaneous Maximum - 11 p.m., 13 April 1956, 1,180 cfs, Remarks: Records fair.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	Nil b	17.1	Nil	Nil	Nil	Nil	Nil	Nil	-	-
2.....	-	-	"	11.4	"	"	"	"	"	"	-	-
3.....	-	-	"	6.7	"	"	"	"	"	"	-	-
4.....	-	-	"	5.6	"	"	"	"	"	"	-	-
5.....	-	-	"	4.3	"	"	"	"	"	"	-	-
6.....	-	-	"	2.0	"	"	"	"	"	"	-	-
7.....	-	-	"	1.9	"	"	"	"	"	"	-	-
8.....	-	-	"	1.4	"	"	"	"	"	"	-	-
9.....	-	-	"	1.5	"	"	"	"	"	"	-	-
10.....	-	-	"	0.6	"	"	"	"	"	"	-	-
11.....	-	-	"	0.5	"	"	"	"	"	"	-	-
12.....	-	-	"	0.0	"	"	"	"	"	"	-	-
13.....	-	-	"	0.2	"	"	"	"	"	"	-	-
14.....	-	-	"	0.0	"	"	"	"	"	"	-	-
15.....	-	-	"	Nil	"	"	"	"	"	"	-	-
16.....	-	-	"	"	"	"	"	"	"	"	-	-
17.....	-	-	"	"	"	"	"	"	"	"	-	-
18.....	-	-	"	"	"	"	"	"	"	"	-	-
19.....	-	-	"	"	"	"	"	"	"	"	-	-
20.....	-	-	"	"	"	"	"	"	"	"	-	-
21.....	-	-	"	"	"	"	"	"	"	"	-	-
22.....	-	-	"	"	"	"	"	"	"	"	-	-
23.....	-	-	"	"	"	"	"	"	"	"	-	-
24.....	-	-	Nil	"	"	"	"	"	"	"	-	-
25.....	-	-	2	"	"	"	"	"	"	"	-	-
26.....	-	-	24	"	"	"	"	"	"	"	-	-
27.....	-	-	78	"	"	"	"	"	"	"	-	-
28.....	-	-	105	"	"	"	"	"	"	"	-	-
29.....	-	-	65b	"	"	"	"	"	"	"	-	-
30.....	-	-	41.2	"	"	"	"	"	"	"	-	-
31.....	-	-	23.2	-	"	-	"	"	-	"	-	-
Mean	-	-	10.9	1.77	Nil	Nil	Nil	Nil	Nil	Nil	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	671	106	Nil	Nil	Nil	Nil	Nil	Nil	-	-

The Period.....Discharge: Daily - Maximum 28 March, 105
(245 days) - Minimum at various times, Nil
Instantaneous Maximum 9 p.m., 27 March, 244
Mean 1.60
Runoff: Acre-feet 777

b - Ice conditions 1 to 29 March.

Location: Lat. 50° 44', long. 103° 20', in NW. 1/4 sec. 22, tp. 20, rge. 10, W. 2nd Mer., Saskatchewan, about four miles east of Abernethy and about fourteen miles above confluence with Qu'Appelle River. Drainage Area: 510 square miles. Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: Mainly March to October, 1946 to date. Station moved upstream about 400 yards from former manual gauge site on eastern boundary of sec. 21, tp. 20 after the 1957 season and recorder established. Extremes Recorded: Daily - Maximum, 15 April 1956, 1,300 cfs, Minimum, Nil at various times. Remarks: Records fair. Records before 1946 collected at station near Blackwood, about one mile above confluence with Qu'Appelle River. Discharge is affected by small storage development upstream.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	Nil ^b	48	2.2	5.0	0.4	Nil	0.0	0.0	-	-
2.....	-	-	"	46	2.1	4.9	0.3	"	0.0	0.0	-	-
3.....	-	-	"	32	2.2	4.6	0.2	"	0.0	0.0	-	-
4.....	-	-	"	27	2.3	4.6	0.2	"	0.0	0.0	-	-
5.....	-	-	"	25	2.4	4.6	0.1	"	0.0	0.0	-	-
6.....	-	-	"	26	2.9	4.4	0.1	"	0.0	0.0	-	-
7.....	-	-	"	22	3.0	4.5	0.1	"	0.0	0.0	-	-
8.....	-	-	"	18b	2.8	4.7	0.1	"	0.0	0.0	-	-
9.....	-	-	"	15.2	3.0	4.3	0.1	"	0.0	0.0	-	-
10.....	-	-	"	15.4	3.1	3.9	0.0	"	0.0	0.0	-	-
11.....	-	-	"	10.1	3.3	3.6	0.0	"	0.0	0.0	-	-
12.....	-	-	"	7.6	3.6	3.6	0.0	"	0.0	0.0	-	-
13.....	-	-	"	6.3	3.6	3.9	0.0	"	0.0	0.0	-	-
14.....	-	-	"	5.0	3.7	3.9	0.0	"	0.0	0.0	-	-
15.....	-	-	"	4.2	3.7	3.5	0.0	"	0.0	0.0	-	-
16.....	-	-	"	3.9	3.9	3.2	0.0	"	0.0	0.0	-	-
17.....	-	-	"	3.6	4.0	3.1	0.0	"	0.0	0.0	-	-
18.....	-	-	"	4.5	4.2	2.9	0.0	"	0.0	0.0	-	-
19.....	-	-	"	3.7	4.3	2.6	0.0	"	0.0	0.0	-	-
20.....	-	-	"	3.8	4.4	2.5	0.0	"	0.0	0.0	-	-
21.....	-	-	"	3.6	4.5	2.1	0.0	"	0.0	0.0	-	-
22.....	-	-	"	3.2	4.6	1.9	0.0	"	0.0	0.0	-	-
23.....	-	-	"	2.9	5.8	1.7	0.0	"	0.0	0.0	-	-
24.....	-	-	"	4.0	7.3	1.4	0.0	"	0.0	0.0	-	-
25.....	-	-	6	2.8	7.8	1.3	0.0	0.0	0.0	0.0	-	-
26.....	-	-	49	2.3	7.2	1.1	0.0	0.0	0.0	0.0	-	-
27.....	-	-	80	2.2	6.4	0.9	0.0	Nil	0.0	0.0	-	-
28.....	-	-	75	2.2	6.3	0.7	0.0	0.0	0.0	0.0	-	-
29.....	-	-	86	2.2	5.9	0.6	0.0	0.0	0.0	0.0	-	-
30.....	-	-	70	2.2	6.0	0.5	Nil	0.0	0.0	0.0	-	-
31.....	-	-	59	-	5.8	-	"	0.0	-	0.0	-	-
Mean	-	-	13.7	11.8	4.27	3.02	0.05	0.00	0.00	0.00	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	843	704	262	180	3.2	0.0	0.0	0.0	-	-

The Period.... Discharge: Daily - Maximum 29 March, 86
 (245 days) - Minimum at various times, Nil
 Instantaneous Maximum 12:30 a.m., 29 March, 100
 Mean 4.10
 Runoff: Acre-feet 1,990

b - Ice conditions 1 March to 8 April.

Location: Lat. 50° 38' 57", long. 102° 02' 20", on southern boundary of SE. 1/4 sec. 26, tp. 19, rge. 1, W. 2nd Mer., Saskatchewan, two and one-half miles east of Esterhazy. Drainage Area: 605 square miles. Gauge: Manual. Measurement of Discharge: From bridge or by wading. Period of Record: March to October, 1956 to date. Extremes Recorded: Daily - Maximum, 19 April 1956, 596 cfs, Minimum, Nil at various times. Remarks: Records good. For April and May 1941 and mainly open water 1942 to 1955 records were published under title "near Tantallon", Station No. 5JM₅.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	0b	36b	Nil	Nil	Nil	Nil	Nil	Nil	-	-
2.....	-	-	0	26e	"	"	"	"	"	"	-	-
3.....	-	-	0	22e	"	"	"	"	"	"	-	-
4.....	-	-	0	19	"	"	"	"	"	"	-	-
5.....	-	-	0	14	"	"	"	"	"	"	-	-
6.....	-	-	0	14	"	"	"	"	"	"	-	-
7.....	-	-	0	10	"	"	"	"	"	"	-	-
8.....	-	-	0	9	"	"	"	"	"	"	-	-
9.....	-	-	0	8e	"	"	"	"	"	"	-	-
10.....	-	-	0	7	"	"	"	"	"	"	-	-
11.....	-	-	0	6e	"	"	"	"	"	"	-	-
12.....	-	-	0	5	"	"	"	"	"	"	-	-
13.....	-	-	0	5	"	"	"	"	"	"	-	-
14.....	-	-	0	4	"	"	"	"	"	"	-	-
15.....	-	-	0	3	"	"	"	"	"	"	-	-
16.....	-	-	0	2	"	"	"	"	"	"	-	-
17.....	-	-	0	2	"	"	"	"	"	"	-	-
18.....	-	-	0	0	"	"	"	"	"	"	-	-
19.....	-	-	0	0	"	"	"	"	"	"	-	-
20.....	-	-	0	0	"	"	"	"	"	"	-	-
21.....	-	-	0	0	"	"	"	"	"	"	-	-
22.....	-	-	0	0	"	"	"	"	"	"	-	-
23.....	-	-	0	0	"	"	"	"	"	"	-	-
24.....	-	-	1	0	"	"	"	"	"	"	-	-
25.....	-	-	2	0	"	"	"	"	"	"	-	-
26.....	-	-	4	0	"	"	"	"	"	"	-	-
27.....	-	-	8	0	"	"	"	"	"	"	-	-
28.....	-	-	15	0	"	"	"	"	"	"	-	-
29.....	-	-	47	0	"	"	"	"	"	"	-	-
30.....	-	-	43	0	"	"	"	"	"	"	-	-
31.....	-	-	40	-	"	-	"	"	-	"	-	-
Mean	-	-	5.2	6.4	Nil	Nil	Nil	Nil	Nil	Nil	-	-
Per sq. mi.	-	-	0.009	0.011	Nil	Nil	Nil	Nil	Nil	Nil	-	-
Acre-feet	-	-	317	381	Nil	Nil	Nil	Nil	Nil	Nil	-	-

The Period..... Discharge: Daily - Maximum 29 March, 47
 (245 days) - Minimum at various times, Nil
 Mean 1.4; Per Square Mile 0.002
 Runoff: Acre-feet 698; Depth in inches on drainage area 0.022

b - Ice conditions 1 March to 1 April.

e - Estimated.

Location: Lat. 50° 34' 52", long. 101° 43' 05", in SW. 1/4 sec. 32, tp. 18, rge. 31, W. 1st Mer., Saskatchewan, at bridge, Highway No. 8. Drainage Area: 386 square miles. Gauge: Staff. Measurement of Discharge: From bridge or by wading. Period of Record: March to October, 1956 to date. Extremes Recorded: Daily - Maximum, 23 April 1956 995 cfs, Minimum, at various times, 0 cfs. Remarks: Records fair. Mainly open water 1942 to 1955 near confluence with Qu'Appelle river, Station No. 5JM₄.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	6b	100	11	11	4	3	20	2	-	-
2.....	-	-	5	126	11	11	4	3	18	3	-	-
3.....	-	-	6	99	21	11	4	3	16	2	-	-
4.....	-	-	6	93	11	14	4	3	15	1	-	-
5.....	-	-	6	75	11	14	4	3	11	0	-	-
6.....	-	-	6	72b	11	12	4	3	8	0	-	-
7.....	-	-	6	62	11	11	6	3	5	0	-	-
8.....	-	-	7	48	13	10	11	3	3	0	-	-
9.....	-	-	7	41	13	9	13	3	1	0	-	-
10.....	-	-	7	32	13	9	11	2	0	0	-	-
11.....	-	-	7	19	13	9	10	2	0	0	-	-
12.....	-	-	7	7	13	8	8	2	0	0	-	-
13.....	-	-	7	7	12	8	6	2	0	0	-	-
14.....	-	-	7	15	12	8	5	1	0	0	-	-
15.....	-	-	7	15	12	8	7	1	0	0	-	-
16.....	-	-	7	15	21	6	6	0	0	0	-	-
17.....	-	-	7	14	16	6	6	0	0	0	-	-
18.....	-	-	7	14	10	10	6	0	0	0	-	-
19.....	-	-	7	14	11	10	6	0	0	0	-	-
20.....	-	-	7	14	11	10	5	0	0	0	-	-
21.....	-	-	7	14	10	9	4	0	0	0	-	-
22.....	-	-	7	14	10	7	4	0	0	1	-	-
23.....	-	-	7	14	9	6	3	0	0	2	-	-
24.....	-	-	7	12	6	6	3	0	0	2	-	-
25.....	-	-	7	12	10	5	3	0	0	2	-	-
26.....	-	-	10	12	11	5	3	0	0	2	-	-
27.....	-	-	28	12	11	5	3	0	0	1	-	-
28.....	-	-	60	11	11	5	3	0	0	1	-	-
29.....	-	-	77	11	11	4	2	11	0	0	-	-
30.....	-	-	70	11	11	4	3	21	1	0	-	-
31.....	-	-	88	-	11	-	3	20	-	0	-	-
Mean	-	-	16.2	33.5	11.9	8.4	5.3	2.9	3.3	0.6	-	-
Per sq. mi.	-	-	0.042	0.087	0.031	0.022	0.014	0.008	0.009	0.002	-	-
Acre-feet	-	-	994	1,990	730	498	325	176	194	38	-	-

The Period..... Discharge: Daily - Maximum 2 April, 126
 (245 days) - Minimum at various times, 0
 Mean 10.2; Per Square Mile 0.026
 Runoff: Acre-feet 4,940; Depth in inches on drainage area 0.243

b - Ice conditions 1 March to 6 April.

FAHLMAN CREEK NEAR DAVIN - STATION No. 5JF₈

Location: Lat. 50° 22' 10", long. 104° 11' 30", in SE. 1/4 sec. 30, tp. 16, rge. 16, W. 2nd Mer., Saskatchewan, about ten miles above confluence with Waskana Creek. Drainage Area: about six square miles. Gauge: Recording. Measurement of Discharge: By concrete V-notch weir. Period of Record: Periods of varying length 1951 to date. Extremes Recorded: Daily - Maximum, 12 July 1955, 240 cfs (estimated), Minimum, Nil at various times; Instantaneous Maximum - about 3 a.m., 12 July 1955, 985 cfs. Remarks: Station operated by Swift Current Experimental Farm for experimental purposes. Records supplied by P. F. R. A. Hydrology Division.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	Nil	Nil	Nil	2.5	0.0	Nil	Nil	Nil	Nil	Nil	Nil	Nil
2.....	"	"	"	2.4	0.0	"	"	"	"	"	"	"
3.....	"	"	"	1.2	0.0	"	"	"	"	"	"	"
4.....	"	"	"	0.6	0.0	"	"	"	"	"	"	"
5.....	"	"	"	0.3	0.0	"	"	"	"	"	"	"
6.....	"	"	"	0.1	0.0	"	"	"	"	"	"	"
7.....	"	"	"	0.1	0.0	"	"	"	"	"	"	"
8.....	"	"	"	0.1	0.0	"	"	"	"	"	"	"
9.....	"	"	"	0.1	0.0	"	"	"	"	"	"	"
10.....	"	"	"	0.0	0.0	"	"	"	"	"	"	"
11.....	"	"	"	0.0	0.0	"	"	"	"	"	"	"
12.....	"	"	"	0.0	0.0	"	0.0	"	"	"	"	"
13.....	"	"	"	0.0	0.0	"	0.0	"	"	"	"	"
14.....	"	"	"	0.0	0.0	"	0.0	"	"	"	"	"
15.....	"	"	"	0.0	0.0	"	Nil	"	"	"	"	"
16.....	"	"	"	0.0	0.0	"	"	"	"	"	"	"
17.....	"	"	"	0.0	Nil	"	"	"	"	"	"	"
18.....	"	"	"	0.0	"	0.0	"	"	"	"	"	"
19.....	"	"	"	0.0	"	0.0	"	"	"	"	"	"
20.....	"	"	"	0.0	"	0.0	"	"	"	"	"	"
21.....	"	"	"	0.0	"	Nil	"	"	"	"	"	"
22.....	"	"	"	0.0	"	"	"	"	"	"	"	"
23.....	"	"	0.0	0.0	"	"	"	"	"	"	"	"
24.....	"	"	0.0	0.0	"	"	"	"	"	"	"	"
25.....	"	"	0.6	0.0	"	"	"	"	"	"	"	"
26.....	"	"	34.8	0.1	"	"	"	"	"	"	"	"
27.....	"	"	31.3	0.0	"	"	"	"	"	"	"	"
28.....	"	"	18.9	0.0	"	"	"	"	"	"	"	"
29.....	"	-	7.5	0.0	"	"	"	"	"	"	"	"
30.....	"	-	6.7	0.0	"	"	"	"	"	"	"	"
31.....	"	-	3.9	-	"	-	"	"	-	"	-	"
Mean	Nil	Nil	3.35	0.25	0.00	0.00	0.00	Nil	Nil	Nil	Nil	Nil
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	Nil	Nil	206	15	0.0	0.0	0.0	Nil	Nil	Nil	Nil	Nil

The Year..... Discharge: Daily - Maximum 26 March, 34.8
 - Minimum at various times, Nil
 Instantaneous Maximum at 5 p.m., 26 March, 91.0
 Mean 0.30
 Runoff: Acre-feet 221

Location: Lat. 51° 39', long. 105° 14', on northern boundary of sec. 8, tp. 31, rge 23, W. 2nd Mer., Saskatchewan, about ten miles west of Lockwood, one-half mile below diversion to Little Manitou Lake and twenty miles above Last Mountain Lake. Gauge: Tape-weight. Measurement of Discharge: From bridge or by wading. Period of Record: March to October, 1958. Extremes Recorded: Daily - Maximum, 3 April 1958, 8.5 cfs, Minimum, Nil at various times. Remarks: Records good during open-water period and fair during ice period.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	Nil b	1.9	3.4	Nil	Nil	Nil	Nil	Nil	-	-
2.....	-	-	"	1.9	2.8	"	"	"	"	"	-	-
3.....	-	-	"	8.5	2.4	"	"	"	"	"	-	-
4.....	-	-	"	5.4	2.4	"	"	"	"	"	-	-
5.....	-	-	"	5.1	2.4	"	"	"	"	"	-	-
6.....	-	-	"	5.1	2.4	"	"	"	"	"	-	-
7.....	-	-	"	3.6	2.5	"	"	"	"	"	-	-
8.....	-	-	"	4.9	2.5	"	"	"	"	"	-	-
9.....	-	-	"	2.4	2.6	"	"	"	"	"	-	-
10.....	-	-	"	2.4	2.6	"	"	"	"	"	-	-
11.....	-	-	"	2.4	2.5	"	"	"	"	"	-	-
12.....	-	-	"	2.1	2.2	"	"	"	"	"	-	-
13.....	-	-	"	1.6	1.9	"	"	"	"	"	-	-
14.....	-	-	"	1.8	1.8	"	"	"	"	"	-	-
15.....	-	-	"	1.6	1.9	"	"	"	"	"	-	-
16.....	-	-	"	1.6	2.2	"	"	"	"	"	-	-
17.....	-	-	"	1.9	2.1	"	"	"	"	"	-	-
18.....	-	-	"	2.5	1.5e	"	"	"	"	"	-	-
19.....	-	-	"	2.4	1.0e	"	"	"	"	"	-	-
20.....	-	-	"	2.4	0.5e	"	"	"	"	"	-	-
21.....	-	-	"	2.8	0.0	"	"	"	"	"	-	-
22.....	-	-	"	1.5	Nil	"	"	"	"	"	-	-
23.....	-	-	"	3.1	"	"	"	"	"	"	-	-
24.....	-	-	"	3.2	"	"	"	"	"	"	-	-
25.....	-	-	"	3.8	"	"	"	"	"	"	-	-
26.....	-	-	"	3.4	"	"	"	"	"	"	-	-
27.....	-	-	"	3.4	"	"	"	"	"	"	-	-
28.....	-	-	2 b	3.8	"	"	"	"	"	"	-	-
29.....	-	-	5.7	4.1	"	"	"	"	"	"	-	-
30.....	-	-	2.1	4.3	"	"	"	"	"	"	-	-
31.....	-	-	2.1	-	"	-	"	"	-	"	-	-
Mean	-	-	0.38	3.16	1.41	Nil	Nil	Nil	Nil	Nil	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	24	188	86	Nil	Nil	Nil	Nil	Nil	-	-

The Period.....Discharge: Daily - Maximum 3 April, 8.5
(245 days) - Minimum at various times, Nil

Mean 0.61

Runoff: Acre-feet 298

b - Ice conditions 1 to 28 March.

e - Estimated.

ARM RIVER NEAR BETHUNE.- STATION No. 5JH₁

Location: Lat. 50° 44' 15", long. 105° 11' 40", in SW. 1/4 sec. 31, tp. 20, rge. 23, W. 2nd Mer., Saskatchewan, about two miles north of Bethune and ten miles above Last Mountain Lake. Drainage Area: 643 square miles. Gauge: Wire-weight. Measurement of Discharge: From highway bridge or by wading. Period of Record: Part-year records 1922, 1923, 1936, 1953 and 1954; March to October, 1955 to date. Extremes Recorded: Daily - Maximum, 7 April 1922, (from observer's estimate of high water mark) 1,500 cfs (estimated), Minimum, Nil at various times. Remarks: Records good during open-water period and fair during ice period.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	16b	218	8.5	4.1	0.2	0.0	0.0	Nil	-	-
2.....	-	-	15	231	7.7	5.4	0.1	0.0	0.0	"	-	-
3.....	-	-	11	206b	7.7	2.5	0.0	0.0	0.0	"	-	-
4.....	-	-	5	148	8.5	1.6	0.0	0.0	0.0	"	-	-
5.....	-	-	4	142	8.5	1.2	0.1	0.0	0.0	"	-	-
6.....	-	-	4	77	9.3	0.9	0.0	0.0	0.0	"	-	-
7.....	-	-	4	46.0	8.5	1.2	0.1	0.0	0.0	"	-	-
8.....	-	-	3	32.0	7.7	1.6	0.0	0.0	0.0	"	-	-
9.....	-	-	1	26.2	6.9	2.0	0.0	0.0	0.0	"	-	-
10.....	-	-	0	21.5	6.1	1.6	0.0	0.0	0.0	"	-	-
11.....	-	-	0	16.0	7.7	1.2	0.0	0.0	0.0	"	-	-
12.....	-	-	0	15.0	6.9	0.6	0.0	0.0	0.0	"	-	-
13.....	-	-	0	13.0	6.1	0.4	0.0	0.0	0.0	"	-	-
14.....	-	-	0	11.1	5.4	0.3	0.0	0.0	0.0	"	-	-
15.....	-	-	Nil	10.2	4.7	1.2	0.0	0.0	0.0	"	-	-
16.....	-	-	"	11.1	4.7	3.0	0.1	0.0	0.0	"	-	-
17.....	-	-	"	9.3	3.5	3.5	0.1	0.0	0.0	"	-	-
18.....	-	-	"	11.1	3.0	3.0	0.1	0.0	0.0	"	-	-
19.....	-	-	"	11.1	2.5	2.5	0.1	0.0	0.0	"	-	-
20.....	-	-	"	11.1	2.0	0.9	0.1	0.0	0.0	"	-	-
21.....	-	-	"	9.3	2.0	2.0	0.1	0.0	Nil	"	-	-
22.....	-	-	"	7.7	1.6	1.2	0.1	0.0	"	"	-	-
23.....	-	-	"	8.5	1.2	0.9	0.1	0.0	"	"	-	-
24.....	-	-	"	8.5	0.9	0.6	0.1	0.0e	"	"	-	-
25.....	-	-	"	7.7	1.2	0.4	0.0	0.0	"	"	-	-
26.....	-	-	18	7.7	2.5	0.3	0.0	0.0	"	"	-	-
27.....	-	-	94	8.5	0.9	0.2	0.0	0.0	"	"	-	-
28.....	-	-	342	12.0	0.9	0.2	0.0	0.0	"	"	-	-
29.....	-	-	408	10.2	0.9	0.1	0.0	0.0	"	"	-	-
30.....	-	-	369	9.3	1.2	0.2	0.0	0.0	"	"	-	-
31.....	-	-	346	-	0.9	-	0.0	0.0e	-	"	-	-
Mean	-	-	52.9	45.2	4.52	1.49	0.05	0.00	0.00	Nil	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	3,250	2,690	278	89	2.8	0.0	0.0	Nil	-	-

The Period.....Discharge: Daily - Maximum 29 March, 408
 (245 days) - Minimum at various times, Nil
 Mean 13.0
 Runoff: Acre-feet 6,310

b - Ice conditions 1 March to 3 April.

e - Estimated.

Location: Lat. 50° 34' 20", long. 105° 19' 50", in NE. 1/4 sec. 35, tp. 18, rge. 25, W. 2nd Mer., Saskatchewan, on dam at extreme east end of lake. Gauge: Staff. Period of Record: Mainly March to October, 1944 to date. Extremes Recorded: Daily - Maximum (Regulated), 18 May 1955, 1,676.33 feet, Minimum, (Regulated) 14 September 1945, 1,660.36 feet. Revisions: 1944 to 1955, W.R.P. 121. Remarks: Elevations are referred to bench mark iron plug six inches from gate hoist on SE. corner of SE. wing wall at concrete control structure, elevation 1,671.25 feet.

Daily Elevations in Feet for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	-	-	-	-	-	-	-	-	-
2.....	-	-	1,669.15	-	1,671.60*	-	-	1,669.66	-	-	-	-
3.....	-	-	-	1,670.63	-	-	-	-	1,669.27	-	-	-
4.....	-	-	-	-	-	1,670.51	1,669.96	-	-	1,669.13	-	-
5.....	-	-	-	-	1,670.91	-	-	1,669.66	-	-	-	-
6.....	-	-	-	-	-	-	-	1,669.51	1,669.34	1,669.19	-	-
7.....	-	-	-	-	-	-	1,669.91	-	-	-	-	-
8.....	-	-	1,669.16	-	-	-	-	1,669.26	1,669.25	-	-	-
9.....	-	-	-	1,670.81	1,670.90	1,670.41	-	-	-	1,669.15	-	-
10.....	-	-	-	-	-	-	-	-	-	-	-	-
11.....	-	-	-	-	-	-	-	1,669.31	-	-	-	-
12.....	-	-	1,669.15	1,671.11	1,670.99	-	1,670.18	-	-	-	-	-
13.....	-	-	-	-	-	1,669.46	-	-	1,669.43*	1,669.21	-	-
14.....	-	-	-	-	-	-	-	-	-	-	-	-
15.....	-	-	-	1,671.09	-	-	1,669.82	1,669.33	1,669.21	-	-	-
16.....	-	-	-	-	1,671.26	-	-	-	-	-	-	-
17.....	-	-	-	-	-	1,670.38	-	-	-	1,669.31	-	-
18.....	-	-	1,669.16	-	-	-	-	-	-	-	-	-
19.....	-	-	-	1,671.71*	-	-	1,669.79	1,669.30	1,669.06	-	-	-
20.....	-	-	-	-	1,670.66	1,670.18	-	-	-	1,669.33	-	-
21.....	-	-	-	-	-	-	-	-	-	-	-	-
22.....	-	-	-	1,671.11	-	-	-	-	-	-	-	-
23.....	-	-	-	1,671.16	1,670.69	1,670.15	1,669.83	1,669.29	1,668.94	-	-	-
24.....	-	-	-	-	1,670.80	-	-	-	-	1,669.27	-	-
25.....	-	-	-	-	-	-	-	1,669.26	-	-	-	-
26.....	-	-	-	1,671.07	1,670.51	-	1,669.73	-	1,669.14	-	-	-
27.....	-	-	-	-	-	1,670.19	-	-	1,668.89	1,669.37	-	-
28.....	-	-	-	1,670.96	1,670.62	-	-	-	-	-	-	-
29.....	-	-	1,669.69	-	-	-	-	1,669.28	-	-	-	-
30.....	-	-	-	-	-	1,670.02	1,669.73	-	1,669.29*	1,669.34	-	-
31.....	-	-	-	-	-	-	-	-	-	1,669.27	-	-

* High winds.

BUFFALO POUND LAKE AT PUMPING STATION - STATION No. 5JG₉

Location: Lat. 50° 35' 00", long. 105° 23' 10", in NE. 1/4 sec. 3, tp. 19, rge. 25, W. 2nd Mer., Saskatchewan, in outer pump well at Regina Water Supply intake, on south shore of lake, two and one-half miles above east dam. Gauge: Recording. Period of Record: July 1955 to date. Extremes Recorded: Daily - Maximum (Regulated), 24 April 1956, 1,675.5 feet, Minimum (Regulated), 23 October 1957, 1,668.9 feet. Remarks: Elevations are referred to bench mark, strip of brass on working floor above float well, elevation 1,680.61 feet. Water elevation in pump well is affected by draw-down during pumping operation and records are accurate only to nearest 0.1 foot. Lake elevation is controlled at dam at east end. All published records including the extremes shown above have been corrected for seiche movement.

Daily Elevations in Feet for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	1,669.4	1,669.4	-	1,669.2	1,669.2	1,669.2	1,670.3	1,671.0	1,670.1	1,670.1	1,669.6	1,669.2
2.....	1,669.4	1,669.4	-	1,669.2	1,669.1	1,669.2	1,670.5	1,671.1	1,670.6	1,670.0	1,669.7	1,669.4
3.....	1,669.5	1,669.3	-	1,669.2	1,669.2	1,669.2	1,670.6	1,671.0	1,670.5	1,670.0	1,669.6	1,669.3
4.....	1,669.5	1,669.3	-	1,669.2	1,669.2	1,669.2	1,670.7	1,671.1	1,670.5	1,670.0	1,669.9	1,669.1
5.....	1,669.5	1,669.3	-	1,669.2	1,669.2	1,669.2	1,670.8	1,671.0	1,670.4	1,670.0	1,669.9	1,669.1
6.....	1,669.6	1,669.4	-	1,669.2	1,669.2	1,669.2	1,670.9	1,671.1	1,670.4	1,670.0	1,669.6	1,669.3
7.....	1,669.5	1,669.5	-	1,669.2	1,669.2	1,669.2	1,671.0	1,671.0	1,670.5	1,669.9	1,669.6	1,669.1
8.....	1,669.4	1,669.3	-	1,669.2	1,669.2	1,669.2	1,671.0	1,671.0	1,670.4	1,669.8	1,669.5	1,669.2
9.....	1,669.4	1,669.3	-	1,669.2	1,669.1	1,669.2	1,671.0	1,671.0	1,670.4	1,669.8	1,668.6	1,669.0
10.....	1,669.4	1,669.3	1,669.3	1,669.2	1,669.1	1,669.2	1,671.0	1,671.0	1,670.4	1,669.9	1,669.5	1,669.1
11.....	1,669.4	1,669.3	1,669.2	1,669.2	1,669.1	1,669.2	1,671.1	1,670.9	1,670.4	1,669.8	1,669.6	1,669.1
12.....	1,669.3	1,669.3	1,669.3	1,669.2	1,669.1	1,669.2	1,671.1	1,670.8	1,670.3	1,669.6	1,669.5	1,668.9
13.....	1,669.4	1,669.3	1,669.2	1,669.2	1,669.1	1,669.2	1,671.1	1,671.1	1,670.3	1,670.3	1,669.5	1,669.1
14.....	1,669.4	1,669.3	1,669.2	1,669.2	1,669.1	1,669.2	1,671.2	1,670.9	1,670.3	1,669.9	1,669.5	1,669.3
15.....	1,669.5	1,669.3	1,669.2	1,669.2	1,669.1	1,669.2	1,671.2	1,670.8	1,670.2	1,669.8	1,669.4	1,669.1
16.....	1,669.4	1,669.3	1,669.2	1,669.2	1,669.1	1,669.2	1,671.1	1,670.9	1,670.3	1,669.8	1,669.4	1,669.0
17.....	1,669.4	1,669.3	1,669.2	1,669.1	1,669.1	1,669.2	1,671.2	1,671.3	1,670.4	1,669.9	1,669.2	1,669.0
18.....	1,669.3	1,669.3	1,669.2	1,669.2	1,669.1	1,669.2	1,671.5	1,670.9	1,670.2	1,669.8	1,669.4	1,669.0
19.....	1,669.4	1,669.3	1,669.2	1,669.2	1,669.1	1,669.2	1,671.4	1,670.8	1,670.4	1,669.8	1,669.3	1,669.0
20.....	1,669.4	1,669.3	1,669.2	1,669.2	1,669.1	1,669.2	1,671.1	1,670.7	1,670.2	1,669.8	1,669.4	1,669.5
21.....	-	1,669.3	1,669.2	1,669.2	1,669.1	1,669.2	1,671.1	1,670.8	1,670.2	1,669.8	1,669.3	1,669.0
22.....	-	1,669.3	1,669.2	1,669.2	1,669.1	1,669.2	1,671.1	1,670.6	-	1,669.8	1,669.4	1,669.0
23.....	-	1,669.3	1,669.2	1,669.2	1,669.1	1,669.2	1,671.2	1,670.7	1,670.3	1,669.8	1,669.3	1,669.0
24.....	-	1,669.3	1,669.2	1,669.2	1,669.3	1,669.2	1,671.2	1,670.7	1,670.2	1,669.9	1,669.2	1,669.1
25.....	-	1,669.3	1,669.2	1,669.2	1,669.2	1,669.2	1,671.2	1,670.6	1,670.2	1,669.8	1,669.2	1,669.1
26.....	-	1,669.3	1,669.2	1,669.1	1,669.2	1,669.2	1,671.1	1,670.8	1,670.1	1,669.8	1,669.1	1,669.2
27.....	1,669.4	1,669.3	1,669.2	1,669.1	1,669.2	1,669.3	1,671.3	1,670.6	1,670.1	1,670.0	1,669.3	1,669.0
28.....	1,669.4	1,669.3	1,669.2	1,669.2	1,669.2	1,669.5	1,671.2	1,670.6	1,670.1	1,669.9	1,669.3	1,669.1
29.....	1,669.3	-	1,669.2	1,669.2	-	1,669.8	1,671.3	1,670.5	1,670.1	1,669.8	1,669.3	1,669.2
30.....	1,669.3	-	1,669.2	1,669.2	-	1,670.0	1,671.4	1,670.5	1,670.1	1,669.7	1,669.3	1,669.3
31.....	1,669.4	-	1,669.2	1,669.2	-	1,670.2	-	1,670.5	-	1,669.7	1,669.4	-

Location: Lat. 50° 46', long. 103° 48', in NW. 1/4 sec. 7, tp. 21, rge. 13, W. 2nd Mer., Saskatchewan, on dam at lake outlet. Gauge: Staff. Period of Record: Mainly March to October, 1944 to date. Station was moved from former location in SW. 1/4 sec. 22, tp. 21, rge. 14, W. 2nd Mer., at Saskatchewan Government Hatchery, in 1945. Extremes Recorded: Daily - Maximum, (Regulated) 9 May 1955, 1,574.38 feet, Minimum, (Regulated) 19 and 31 October 1946, 1,567.95 feet. Remarks: Elevations are referred to bench mark P. F. R. A. bronze plug in concrete near fence at right of path to dam, elevation 1,578.14 feet. Lake elevation controlled by dam at outlet.

Daily Elevations in Feet for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	-	-	-	1,571.71	-	-	-	-	-
2.....	-	-	-	-	-	1,571.69	-	-	-	-	1,571.03	-
3.....	-	-	-	-	-	-	-	-	-	-	-	-
4.....	-	-	-	-	-	-	-	-	-	-	-	-
5.....	-	-	-	-	-	-	1,571.72	-	-	-	-	-
6.....	-	-	-	-	1,571.13	-	-	-	-	1,571.08	-	-
7.....	-	-	1,571.01	-	-	-	-	1,571.56	1,571.32	-	-	-
8.....	-	-	-	1,571.65	-	-	-	-	1,571.34	-	-	-
9.....	-	-	-	-	-	-	1,571.66	-	-	-	-	-
10.....	-	-	-	-	-	1,571.76	-	-	-	-	-	-
11.....	-	-	-	-	-	-	-	-	-	-	-	-
12.....	-	-	-	-	1,571.70	-	-	-	-	-	-	-
13.....	-	-	-	-	-	-	-	-	-	1,570.98	-	-
14.....	-	-	-	-	-	-	-	-	1,571.34	-	-	-
15.....	-	-	-	-	-	-	-	-	-	-	-	-
16.....	-	-	-	1,572.25	-	1,571.72	-	1,571.37	-	-	-	-
17.....	-	-	-	-	-	-	-	-	-	-	-	-
18.....	-	-	-	-	-	-	1,571.72	-	-	-	-	-
19.....	-	-	-	-	1,571.71	-	-	-	-	1,571.03	-	-
20.....	-	-	-	-	-	-	-	-	-	-	-	-
21.....	-	-	-	1,571.75	-	-	-	-	1,571.45	-	-	-
22.....	-	-	-	-	-	-	-	-	-	-	-	-
23.....	-	-	-	-	-	1,571.72	-	-	-	-	-	-
24.....	-	-	-	-	-	-	-	1,571.31	-	-	-	-
25.....	-	-	-	1,571.68	1,571.66	-	-	-	-	-	-	-
26.....	-	-	1,571.20	-	1,571.76	-	-	-	-	-	-	-
27.....	-	-	1,571.20	1,571.75	-	-	-	-	1,571.14	1,571.03	-	-
28.....	-	-	-	-	-	-	-	-	1,571.16	-	-	-
29.....	-	-	-	-	-	-	-	-	-	-	-	-
30.....	-	-	-	-	-	-	-	-	-	-	-	-
31.....	-	-	1,571.54	-	-	-	-	1,571.07	-	1,570.98	-	-

Location: Lat. 50° 35', long. 102° 39', in SE. 1/4 sec. 8, tp. 19A, rge. 5, W. 2nd Mer., Saskatchewan, near outlet to Qu'Appelle River at east end of lake and about four miles west and fifteen miles north of Broadview. Gauge: Staff. Period of Record: Periods of varying length 1944 to date. Extremes Recorded: Daily - Maximum (Regulated) 8 May 1955, 1,490.73 feet, Minimum (Regulated) 8 January 1958, 1,478.42 feet. Remarks: Lake elevation is controlled by dam at outlet. Elevations are referred to bronze plug in southwest corner of fish ladder well on outlet structure, elevation 1,487.64 feet. Elevations for 1956 to 1958 supplied by P. F. R. A.

Daily Elevations in Feet for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	1,478.59	1,478.65	1,479.45	1,482.46	1,481.56	1,481.54	1,480.82	1,480.46	-	1,480.13	-
2.....	1,478.70	-	-	1,480.09	1,482.41	1,481.57	1,481.52	1,480.80	1,480.45	-	-	-
3.....	1,478.70	1,478.59	1,478.67	1,480.30	1,482.34	1,481.57	1,481.48	1,480.78	1,480.44	-	-	-
4.....	-	-	-	1,480.78	1,482.25	1,481.57	1,481.45	1,480.75	1,480.43	-	1,480.13	-
5.....	-	1,478.57	1,478.66	1,481.17	1,482.20	1,481.57	1,481.42	1,480.73	1,480.42	1,480.21	-	-
6.....	1,478.45	-	-	1,481.40	1,482.15	1,481.57	1,481.38	1,480.68	1,480.41	-	1,480.08	-
7.....	-	1,478.57	1,478.65	1,481.55	1,482.10	1,481.57	1,481.37	1,480.64	1,480.40	-	-	-
8.....	1,478.42	-	1,478.65	1,481.65	1,482.00	1,481.57	1,481.36	1,480.61	1,480.39	-	1,480.05	1,480.10
9.....	-	1,478.57	-	1,481.73	1,481.95	1,481.57	1,481.34	1,480.58	1,480.38	1,480.17	-	-
10.....	1,478.52	-	1,478.65	1,481.83	1,481.88	1,481.57	1,481.30	1,480.55	1,480.37	-	1,480.05	1,480.10
11.....	1,478.55	-	-	1,481.90	1,481.83	1,481.56	1,481.27	1,480.55	1,480.36	-	-	-
12.....	-	1,478.56	1,478.65	1,481.97	1,481.72	1,481.56	1,481.21	1,480.55	1,480.35	-	-	-
13.....	-	-	-	1,482.04	1,481.70	1,481.55	1,481.22	1,480.55	1,480.34	1,480.15	-	-
14.....	1,478.55	1,478.55	1,478.65	1,482.10	1,481.68	1,481.54	1,481.24	1,480.55	1,480.34	-	-	-
15.....	-	-	-	1,482.17	1,481.65	1,481.54	1,481.18	1,480.55	1,480.34	1,480.13	1,480.00	1,480.17
16.....	-	1,478.55	1,478.65	1,482.24	1,481.60	1,481.53	1,481.17	1,480.55	1,480.33	-	-	-
17.....	1,478.55	-	-	1,482.27	1,481.50	1,481.53	1,481.16	1,480.55	1,480.33	-	-	1,480.10
18.....	-	1,478.55	1,478.65	1,482.25	1,481.48	1,481.53	1,481.14	1,480.55	1,480.33	-	-	-
19.....	1,478.55	-	-	1,482.30	1,481.47	1,481.55	1,481.11	1,480.54	1,480.33	-	-	1,480.06
20.....	-	1,478.55	1,478.65	-	1,481.45	1,481.56	1,481.08	1,480.54	1,480.33	-	-	-
21.....	-	-	-	1,482.45	1,481.45	1,481.56	1,481.06	1,480.54	1,480.33	-	-	1,480.03
22.....	1,478.55	1,478.55	1,478.65	1,482.50	1,481.47	1,481.56	1,481.05	1,480.54	1,480.33	-	-	-
23.....	-	-	-	1,482.52	1,481.48	1,481.55	1,481.04	1,480.54	1,480.33	1,480.13	-	1,480.00
24.....	-	1,478.55	1,478.70	1,482.55	1,481.48	1,481.54	1,481.02	1,480.54	1,480.32	-	-	-
25.....	1,478.56	-	-	1,482.55	1,481.48	1,481.53	1,480.98	1,480.54	1,480.31	-	-	1,479.98
26.....	-	1,478.58	1,478.75	1,482.55	1,481.49	1,481.52	1,480.95	-	1,480.30	-	-	1,479.95
27.....	-	-	-	1,482.55	1,481.51	1,481.50	1,480.95	-	1,480.29	-	-	-
28.....	1,478.57	1,478.62	1,478.80	1,482.58	1,481.53	1,481.49	1,480.94	-	-	-	-	1,479.93
29.....	-	-	1,478.90	1,482.55	1,481.54	1,481.50	1,480.91	1,480.53	-	1,480.15	-	-
30.....	1,478.59	-	1,479.05	1,482.50	1,481.55	1,481.52	1,480.88	-	-	-	-	-
31.....	-	-	1,479.25	-	1,481.56	-	1,480.85	1,480.47	-	-	-	1,479.92

ROUND LAKE NEAR WHITEWOOD - STATION No. 5JM₇

Location: Lat. 50° 31', long. 102° 19', in NW. 1/4 sec. 14, tp. 18, rge. 3, W. 2nd Mer., Saskatchewan, at control structure about fifteen miles north of Whitewood. Gauge: Staff. Period of Record: Periods of varying length 1944 to date. Records from 1944 to June 1946 were obtained in SE. 1/4 sec. 14 and from June 1946 to 1955 in SE. 1/4 sec. 22. Extremes Recorded: Daily - Maximum (Regulated), 9 May 1955, 1,461.00 feet (estimated), Minimum (Regulated), 1 January 1958, 1,447.90 feet. Remarks: Elevations are referred to bronze plug in southwest corner of concrete well at fish ladder in dam at outlet of lake, elevation 1,457.04 feet. Elevations from 1956 to 1958 supplied by P. F. R. A.

Daily Elevations in Feet for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	1,447.90	1,448.35	1,448.35	1,449.00	1,450.95	1,450.40	-	-	-	1,449.45	-	-
2.....	-	1,448.35	-	1,449.10	1,450.95	1,450.40	1,450.45	1,450.45	1,450.00	-	-	-
3.....	1,448.55	-	-	1,449.20	1,450.95	1,450.40	-	1,450.40	-	-	-	-
4.....	1,448.55	-	1,448.40	1,449.25	1,450.90	1,450.40	-	-	1,449.95	1,449.40	-	-
5.....	-	1,448.30	-	1,449.30	1,450.90	1,450.45	1,450.50	-	-	-	-	-
6.....	1,448.55	-	1,448.40	1,449.35	1,450.85	1,450.45	1,450.55	1,450.35	1,449.90	-	-	-
7.....	-	-	-	1,449.45	1,450.85	1,450.45	-	-	-	-	-	-
8.....	1,448.50	1,448.30	1,448.40	1,449.46	1,450.78	1,450.45	-	-	1,449.75	-	-	-
9.....	-	-	-	1,449.55	1,450.75	1,450.45	-	1,450.25	-	1,449.30	-	-
10.....	-	1,448.30	1,448.35	1,449.60	1,450.70	-	1,450.50	-	1,449.75	-	-	1,449.60
11.....	1,448.45	-	-	1,449.65	1,450.60	-	-	1,450.20	-	-	-	-
12.....	-	1,448.30	1,448.35	1,449.65	1,450.55	1,450.45	1,450.50	-	-	-	-	-
13.....	-	-	-	1,449.78	1,450.50	-	1,450.65	1,450.20	1,449.70	-	-	-
14.....	1,448.45	-	-	1,449.85	1,450.45	1,450.45	-	-	-	-	-	-
15.....	-	1,448.30	1,448.35	1,449.90	1,450.40	-	-	-	1,449.40	-	-	-
16.....	1,448.40	-	-	1,450.00	1,450.38	-	1,450.70	1,450.15	-	-	-	-
17.....	-	-	1,448.35	1,450.15	1,450.40	-	-	1,450.15	-	-	-	-
18.....	1,448.40	1,448.30	-	1,450.25	1,450.30	1,450.50	-	-	1,449.65	-	-	-
19.....	-	-	1,448.35	1,450.40	1,450.15	-	1,450.75	-	-	-	-	-
20.....	1,448.40	1,448.30	-	-	1,450.10	-	1,450.75	1,450.10	1,449.60	-	-	-
21.....	-	-	1,448.35	1,450.72	1,450.40	1,450.50	-	-	-	-	-	-
22.....	1,448.35	1,448.30	-	1,450.90	1,450.40	-	-	-	1,449.55	-	-	-
23.....	-	-	1,448.35	1,451.00	1,450.35	-	1,450.65	1,450.05	-	-	-	-
24.....	-	1,448.35	-	1,451.05	1,450.35	1,450.50	-	1,450.05	1,449.50	-	-	-
25.....	1,448.35	-	1,448.35	1,451.00	1,450.40	-	-	-	-	-	-	-
26.....	-	-	1,448.35	1,451.00	1,450.40	-	1,450.60	-	-	-	-	-
27.....	1,448.35	1,448.35	1,448.40	1,451.05	1,450.40	-	-	1,450.00	1,449.45	-	-	-
28.....	-	-	1,448.45	1,451.05	1,450.40	1,450.50	1,450.55	-	-	-	-	-
29.....	1,448.35	-	1,448.50	1,451.10	1,450.40	1,450.45	-	-	-	-	-	-
30.....	-	-	1,448.90	1,450.10	1,450.40	-	-	1,450.05	-	-	-	-
31.....	-	-	1,448.90	-	1,450.40	-	1,450.50	-	-	-	-	-

Location: Lat. 50° 26' 10", long. 104° 37' 00", Saskatchewan, on Waskana Creek above the Albert Street dam in the City of Regina. Drainage Area: Of Waskana Creek above the dam, 1,220 square miles. Gauge: Staff. Period of Record: Periods of varying length during 1924 to 1931, 1933 to 1936 and 1938 to date. Prior to 1938, records were not published but may be obtained upon application to the District Engineer at Calgary, for address see page 8. Extremes Recorded: Maximum (Regulated), observed at 9:45 a.m., 31 March 1925, 1,874.81 feet, Minimum - Lake dry at various times. Revisions: 1938, W.R.P. 121. Remarks: Elevations are referred to Geodetic Survey of Canada bench mark No. 3-D-2, horizontal bolt in stone work on north wall of Parliament Buildings, elevation 1,886.122 feet (Bulletin No. 22, 1952). Lake elevation subject to control by dam at outlet.

Daily Elevations in Feet for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	1,872.22	1,871.46	-	-	1,869.29	-	1,867.70	1,867.03	-
2.....	-	-	-	1,872.31	1,371.44	1,870.57	1,869.92	-	1,868.59	1,867.71	-	-
3.....	-	-	-	1,872.24	1,871.48	1,870.59	1,869.89	-	1,868.58	-	-	-
4.....	-	-	-	1,872.32	1,871.53	1,870.55	1,869.82	1,869.17	1,868.55	-	-	-
5.....	-	-	-	1,872.35	1,871.46	1,870.53	1,869.85	1,869.11	1,868.50	-	-	-
6.....	-	-	-	1,872.35	1,871.45	1,870.50	-	1,869.09	1,868.57	-	-	-
7.....	-	-	-	1,872.34	1,871.37	-	1,869.85	1,869.07	-	-	-	-
8.....	-	-	-	1,872.33	1,871.35	-	1,869.83	1,869.01	1,868.42	-	-	-
9.....	-	-	1,867.81	1,872.19	1,871.31	1,870.43	1,869.79	-	1,868.37	-	-	-
10.....	-	-	-	1,872.05	1,871.31	1,870.39	1,869.78	-	1,868.28	-	-	-
11.....	-	-	-	1,872.00	-	1,870.37	1,869.75	1,868.87	1,868.25	-	-	-
12.....	-	-	-	1,871.91	1,871.31	1,870.36	-	1,868.83	1,868.20	-	-	-
13.....	-	-	-	1,871.83	1,871.09	1,870.33	-	1,868.79	-	-	-	-
14.....	-	-	-	1,871.76	1,871.12	-	1,869.80	1,868.73	-	-	-	-
15.....	-	-	-	1,871.80	1,871.11	-	1,869.81	1,868.69	1,868.12	-	-	-
16.....	-	-	-	1,871.83	1,871.11	1,870.29	1,869.79	-	1,868.04	-	-	-
17.....	-	-	-	1,871.76	-	1,870.27	1,869.77	-	1,867.96	-	-	-
18.....	-	-	-	1,871.70	-	1,870.26	1,869.77	1,868.57	1,867.86	-	-	-
19.....	-	-	-	1,871.65	-	1,870.22	-	1,868.57	1,867.66	-	-	-
20.....	-	-	-	1,871.68	1,870.95	1,870.21	-	1,868.51	-	-	-	-
21.....	-	-	-	1,871.72	1,870.87	-	1,869.69	1,868.46	1,867.56	-	-	-
22.....	-	-	-	1,871.72	1,870.97	-	1,869.67	1,868.41	1,867.54	-	-	-
23.....	-	-	-	1,871.64	1,870.81	1,870.17	1,869.59	-	1,867.53	-	-	-
24.....	-	-	-	1,871.65	1,870.75	1,870.13	1,869.57	-	1,867.56	-	-	-
25.....	-	-	-	-	1,870.72	1,870.11	1,869.53	1,868.31	1,867.56	-	-	-
26.....	-	-	-	1,871.57	1,870.67	1,870.09	1,869.49	1,868.27	1,867.58	-	-	-
27.....	-	-	1,868.14	1,871.54	1,870.70	1,870.05	-	1,868.23	-	-	-	-
28.....	-	-	1,869.43	1,871.51	1,870.69	-	-	1,868.35	-	-	-	-
29.....	-	-	1,871.01	1,871.44	1,870.70	-	1,869.41	1,868.62	1,867.68	-	-	-
30.....	-	-	1,871.84	1,871.46	1,870.65	1,869.97	1,869.36	-	1,867.70	-	-	-
31.....	-	-	1,872.17	-	-	-	1,869.33	-	-	-	-	-

LAST MOUNTAIN LAKE AT REGINA BEACH - STATION No. 5JH₂

Location: Lat, 50° 48', long, 104° 59', in SW, 1/4 sec. 22, tp. 21, rge. 22, W. 2nd Mer., Saskatchewan, on wharf at north end of main street of Regina Beach. Gauge: Staff. Period of Record: Periods of varying length 1944 to date. Extremes Recorded: Daily - Maximum, 2 June 1955, 1,614.50 feet, Minimum, 10 and 17 October 1946, 1,598.56 feet. Remarks: Elevations are referred to P.F.R.A. bench mark No. 117, fifty feet south and 33.5 feet east of southeast corner of pier, elevation 1,608.83 feet. This bench mark under water since 1955 and temporary bench mark, northerly reinforcing rail in pump sump at end of Main Street, approximate elevation 1,618.80 feet, has been used since 1955. Lake elevation is controlled by dams.

Daily Elevations in Feet for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	1,609.04	1,608.92	-	-	1,608.91	1,608.92	1,609.24	1,609.54	-	1,609.03	-	-
2.....	-	1,608.85	-	1,608.87	-	-	1,609.33	-	-	-	1,608.84	1,608.33
3.....	1,609.05	-	1,608.83	-	-	-	1,609.27	1,609.51	1,609.23	1,609.03	-	-
4.....	-	-	-	1,608.86	1,608.90	1,608.99	-	-	-	-	-	1,608.33
5.....	1,609.17	1,608.85	1,608.84	-	-	-	1,609.30	-	1,609.23	1,610.13	1,608.73	-
6.....	-	-	-	-	1,608.92	1,609.03	-	1,609.67	-	-	-	1,609.42
7.....	-	1,608.89	1,608.84	1,608.87	-	-	1,609.39	-	1,609.34	1,608.93	1,608.71	-
8.....	1,608.98	-	-	-	1,608.92	1,609.02	1,609.41	1,609.68	-	1,608.93	1,608.58	-
9.....	-	1,608.84	-	1,608.89	-	-	-	-	-	-	1,608.73	1,608.22
10.....	-	-	1,608.82	-	-	-	1,609.40	1,609.64	1,609.37	1,608.93	-	-
11.....	1,608.94	1,608.84	-	1,608.93	1,608.91	1,609.02	-	-	-	-	-	1,608.22
12.....	1,608.88	1,608.85	1,608.82	-	-	-	1,609.41	-	1,609.23	1,608.92	1,608.53	-
13.....	-	-	-	-	1,608.91	1,609.02	-	1,609.66	-	-	-	1,608.17
14.....	-	1,608.85	1,608.82	1,608.92	-	-	-	-	1,608.86	-	1,608.53	-
15.....	1,608.94	-	-	-	1,608.91	1,609.03	1,609.43	1,609.47	-	1,608.92	-	-
16.....	-	1,608.85	-	1,608.90	-	-	-	-	-	-	1,608.82	1,608.22
17.....	1,608.94	-	1,608.82	-	-	-	1,609.43	1,609.77	1,609.12	1,608.92	-	-
18.....	-	-	-	1,608.90	1,608.92	1,609.02	-	-	-	-	-	1,608.23
19.....	1,608.90	1,608.86	1,608.83	-	-	-	1,609.98	-	1,609.21	1,608.92	1,608.53	-
20.....	-	-	-	-	1,608.92	1,609.02	-	1,609.41	-	-	-	-
21.....	-	1,608.85	1,608.84	1,608.90	-	-	-	-	1,609.03	-	-	-
22.....	1,608.94	-	-	-	1,608.92	1,609.01	1,610.05	1,609.41	-	1,608.87	-	-
23.....	-	1,608.85	-	1,608.90	-	-	-	-	-	-	1,608.48	-
24.....	1,608.94	-	1,608.85	-	-	-	1,609.80	1,609.43	1,609.07	1,608.87	-	-
25.....	-	-	-	1,608.90	1,608.91	1,609.03	-	-	-	-	-	1,608.54
26.....	1,608.87	1,608.84	1,608.87	-	-	-	1,610.05	1,609.33	1,609.03	1,608.82	1,608.43	-
27.....	-	-	-	-	1,608.91	1,609.07	-	1,609.33	-	-	-	1,608.10
28.....	-	1,608.84	1,608.89	1,608.90	-	-	-	-	1,609.03	-	1,608.42	1,608.04
29.....	1,608.84	-	-	-	-	1,609.11	1,610.07	1,609.25	-	1,608.82	-	-
30.....	-	1,608.82	-	1,608.90	-	-	-	-	-	-	1,608.37	-
31.....	-	-	1,608.87	-	-	-	-	1,609.27	-	1,608.82	-	-

MISCELLANEOUS DISCHARGE MEASUREMENTS MADE IN QU'APPELLE RIVER TRIBUTARY BASIN
FOR WATER YEAR 1958

Date	Stream	Location	Discharge cfs
8 July	Elbow Diversion Canal to Qu'Appelle River	At head of canal downstream from second pumping station	92

YELLOW GRASS DITCH NEAR YELLOW GRASS - STATION No. 5NB₁₁

Location: Lat. 49° 47' 15", long. 104° 02' 20", in SW. 1/4 sec. 6, tp. 10, rge. 15, W. 2nd Mer., Saskatchewan, at Four Corners. Drainage Area: 570 square miles. Gauge: Staff. Measurement of Discharge: From bridge or by wading. Period of Record: March to October, 1957 to date. Extremes Recorded: Daily - Maximum, 1 April 1958, 50 cfs, Minimum, Nil at various times. Remarks: Records fair.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	Nil b	50	5	0	Nil	Nil	Nil	Nil	-	-
2.....	-	-	"	35b	4	0	"	"	"	"	-	-
3.....	-	-	"	39	2	0	"	"	"	"	-	-
4.....	-	-	"	42	1	0	"	"	"	"	-	-
5.....	-	-	"	42	1	0	"	"	"	"	-	-
6.....	-	-	"	42	1	0	"	"	"	"	-	-
7.....	-	-	"	42	1	0	"	"	"	"	-	-
8.....	-	-	"	42	1	0	"	"	"	"	-	-
9.....	-	-	"	42	1	0	"	"	"	"	-	-
10.....	-	-	"	42	1	0	"	"	"	"	-	-
11.....	-	-	"	39	1	0	"	"	"	"	-	-
12.....	-	-	"	36	1	0	"	"	"	"	-	-
13.....	-	-	"	34	1	0	"	"	"	"	-	-
14.....	-	-	"	31	0	0	"	"	"	"	-	-
15.....	-	-	"	26	0	0	"	"	"	"	-	-
16.....	-	-	"	26	0	0	"	"	"	"	-	-
17.....	-	-	"	26	0	0	"	"	"	"	-	-
18.....	-	-	"	26	0	0	"	"	"	"	-	-
19.....	-	-	"	17	0	0	"	"	"	"	-	-
20.....	-	-	"	13	0	0	"	"	"	"	-	-
21.....	-	-	"	13	0	0	"	"	"	"	-	-
22.....	-	-	"	12	0	0	"	"	"	"	-	-
23.....	-	-	"	10	0	0	"	"	"	"	-	-
24.....	-	-	"	8	0	0	"	"	"	"	-	-
25.....	-	-	"	7	0	0	"	"	"	"	-	-
26.....	-	-	Nil	7	0	0	"	"	"	"	-	-
27.....	-	-	0	7	0	0	"	"	"	"	-	-
28.....	-	-	0	7	0	0	"	"	"	"	-	-
29.....	-	-	0	5	0	0	"	"	"	"	-	-
30.....	-	-	45	5	0	0	"	"	Nil	"	-	-
31.....	-	-	48	-	0	-	Nil	Nil	-	Nil	-	-
Mean	-	-	3.0	26.0	0.7	0	Nil	Nil	Nil	Nil	-	-
Per sq. mi.	-	-	0.005	0.046	0.001	0	Nil	Nil	Nil	Nil	-	-
Acre-feet	-	-	184	1,530	42	0	Nil	Nil	Nil	Nil	-	-

The Period.....Discharge: Daily - Maximum 1 April, 50
 (245 days) - Minimum at various times, Nil
 Mean 3.6; Per Square Mile 0.006
 Runoff: Acre-feet 1,760; Depth in inches on drainage area 0.058

b - Ice conditions 1 March to 2 April.

Location: Lat. 49° 11' 55", long. 103° 15' 40", in NW. 1/4 sec. 11, tp. 3, rge. 10, W. 2nd Mer., Saskatchewan, eight miles south of Macoun. Drainage Area: 2,320 square miles. Gauge: Tape-weight. Measurement of Discharge: From bridge or by wading. Period of Record: Mainly open water 1956 to 1958 (discontinued). Extremes Recorded: Daily - Maximum, 26 June 1956, 598 cfs, Minimum, Nil at various times. Remarks: Records fair.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	Nil b	36	20e	0	4	9	0	0	-	-
2.....	-	-	"	36	18	0	5	9	0	0	-	-
3.....	-	-	"	30	17	0	6	7	0	0	-	-
4.....	-	-	"	26	17	0e	8	7	0	0	-	-
5.....	-	-	"	34	16	0	8	8	0	0	-	-
6.....	-	-	"	135b	14	0	10	7	0	0	-	-
7.....	-	-	"	233	10	0	10	5	0	0	-	-
8.....	-	-	"	229	10	0	10	5	0	0	-	-
9.....	-	-	"	150	8	0e	10	4	0	0	-	-
10.....	-	-	"	121	6	0	10	4	0	0	-	-
11.....	-	-	"	122	6	0	19	4	0	0	-	-
12.....	-	-	"	114	5	0	25	4	0	0	-	-
13.....	-	-	"	102	7	0	29	3	0	0	-	-
14.....	-	-	"	90	4	0e	36	3	0	0	-	-
15.....	-	-	"	77	4	0	34	2e	0	0	-	-
16.....	-	-	"	70	4	0	32e	2	0	0	-	-
17.....	-	-	"	65	3e	0	30	2	0	0	-	-
18.....	-	-	"	55	2	0e	26	1	0	0	-	-
19.....	-	-	"	33	2	0	25	1	0	0	-	-
20.....	-	-	"	39	1	0	23	1	0	0	-	-
21.....	-	-	"	45	1	0	23	1	0	0	-	-
22.....	-	-	"	54	1	0	22	1	0	0	-	-
23.....	-	-	"	58	1	0	21	1	0	0	-	-
24.....	-	-	"	64	1	0	20	1	0	0	-	-
25.....	-	-	"	59	0	0	18e	1	0	0	-	-
26.....	-	-	Nil	49	1	0e	16	0	0	0	-	-
27.....	-	-	10	45	1	1	15	0	0	0	-	-
28.....	-	-	26	30	1e	2	14	0e	0	0	-	-
29.....	-	-	31	26	0	2	12	0	0	0	-	-
30.....	-	-	31	23	0e	3e	12e	0	0	0	-	-
31.....	-	-	33	-	0	-	11	0	-	0	-	-
Mean	-	-	4.2	75.0	5.8	0.3	17.5	3.0	0.0	0.0	-	-
Per sq. mi.	-	-	0.002	0.032	0.002	0.000	0.008	0.001	0.000	0.000	-	-
Acre-feet	-	-	260	4,460	359	16	1,080	184	0	0	-	-

The Period.....Discharge: Daily - Maximum 7 April, 233
(245 days) - Minimum at various times, 0

Mean 13.1; Per Square Mile 0.006

Runoff: Acre-feet 6,360; Depth in inches on drainage area 0.050

b - Ice conditions 1 March to 6 April.

e - Estimated.

Location: Lat. 49° 04' 20", long. 102° 48' 30", in NW. 1/4 sec. 30, tp. 1, rge. 6, W. 2nd Mer., Saskatchewan, at highway bridge. Drainage Area: 5,370 square miles. Gauge: Measuring point; elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. Measurement of Discharge: From bridge or by wading. Period of Record: March to October, 1956 to date. Extremes Recorded: Daily - Maximum, 14 April 1956, 1,430 cfs (elevation 1,731.50 ft.), Minimum, at various times, 0 cfs. Remarks: Records good during open-water period; fair during ice period.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	0b	90	4.0	0.4	0	0	0	0	-	-
2.....	-	-	0	82	3.6	0.5	0	0	0	0	-	-
3.....	-	-	0	51	3.6	0.5	0	0	0	0	-	-
4.....	-	-	0	53	11	0.4	0	0	0	0	-	-
5.....	-	-	0	60	15	0.4	0	0	0	0	-	-
6.....	-	-	0	152b	24	0.5	0	0	0	0	-	-
7.....	-	-	0	285	22	0.3	0	0	0	0	-	-
8.....	-	-	0	261	17	0.1	0	0	0	0	-	-
9.....	-	-	0	204	24	0	0	0	0	0	-	-
10.....	-	-	0	165	26	0	0	0	0	0	-	-
11.....	-	-	0	140	18	0	0	0	0	0	-	-
12.....	-	-	0	114	24	0	0	0	0	0	-	-
13.....	-	-	0	89	21	0	0	0	0	0	-	-
14.....	-	-	0	79	18	0	0	0	0	0	-	-
15.....	-	-	0	61	15	0	0	0	0	0	-	-
16.....	-	-	0	53	14	0.4	0	0	0	0	-	-
17.....	-	-	0	55	10	1.1	0	0	0	0	-	-
18.....	-	-	0	56	6.8	1.2	0	0	0	0	-	-
19.....	-	-	0	54	4.0	1.0	0	0	0	0	-	-
20.....	-	-	0	49	3.2	0.8	0	0	0	0	-	-
21.....	-	-	0	45	3.4	0.5	0	0	0	1.7	-	-
22.....	-	-	0	40	2.0	0.5	0	0	0	0.8	-	-
23.....	-	-	0	35	2.0	0.5	0	0	0	0.5	-	-
24.....	-	-	0	27	1.8	0.5	0	0	0	0.2	-	-
25.....	-	-	12	20	1.6	0.4	0	0	0	0.2	-	-
26.....	-	-	21	11	1.1	0.5	0	0	0	0.1	-	-
27.....	-	-	95	6.8	0.5	0.4	0	0	0	0.1	-	-
28.....	-	-	96	6.5	0.5	0.3	0	0	0	0.1	-	-
29.....	-	-	145	6.5	0.4	0.2	0	0	0	0.0	-	-
30.....	-	-	151	4.0	0.6	0.2	0	0	0	0.0	-	-
31.....	-	-	158	-	0.5	-	0	0	-	0.0	-	-
Mean	-	-	21.9	78	9.6	0.4	0.0	0.0	0.0	0.1	-	-
Per sq. mi.	-	-	0.004	0.014	0.001	0.000	0.000	0.000	0.000	0.000	-	-
Acre-feet	-	-	1,340	4,670	592	23	0	0	0	7	-	-

The Period.....Discharge: Daily - Maximum 7 April 285 (elevation 1,723.22)
 (245 days) - Minimum at various times, 0

Mean 13.7; Per Square Mile 0.002

Runoff: Acre-feet 6,630; Depth in inches on drainage area 0.023

b - Ice conditions 1 March to 6 April.

Location: Lat. 49° 12' 55", long. 102° 10' 14", in NW. 1/4 sec. 14, tp. 3, rge. 2, W. 2nd Mer., Saskatchewan, above P.F.R.A. Dam. Drainage Area: 9,395 square miles. Gauge: Staff and recording. Measurement of Discharge: From bridge or by wading. Period of Record: Mainly open water 1928 to 1930 and 1942 to date. Extremes Recorded: Daily - Maximum, 27 April 1948, 7,760 cfs, Minimum, Nil at various times. Remarks: Records good. For mainly open-water periods 1911 to 1917, records were published under title "near Glen Ewen", Station No. 5ND₁.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	4e	1,070	77	8.1	1.3	0.8	0.4	0.2	-	-
2.....	-	-	3	590	62	7.5	1.2	0.7	0.4	0.2	-	-
3.....	-	-	2	443	56	7.5	1.2	0.7	0.4	0.2e	-	-
4.....	-	-	2	457	43	6.9	1.2	0.7	0.4	0.2	-	-
5.....	-	-	2	464	39	6.4	1.2	0.7	0.4	0.2	-	-
6.....	-	-	2	477	39	5.8	1.2	0.7	0.4e	0.2	-	-
7.....	-	-	2	443	28	4.6	1.2	0.7	0.4	0.2	-	-
8.....	-	-	2e	506	28	4.6	1.2	0.7	0.3	0.2	-	-
9.....	-	-	5	543	31	4.6	1.2	0.7	0.3	0.3	-	-
10.....	-	-	5	484	28	4.1	1.2	0.7	0.3	0.2	-	-
11.....	-	-	5	410	43	3.3	1.2	0.6	0.3	0.2	-	-
12.....	-	-	5	354	46	3.3	1.2	0.6	0.3	0.2	-	-
13.....	-	-	5	320	56	3.3	1.1	0.6	0.3	0.2	-	-
14.....	-	-	5	292	62	3.2	1.1	0.6	0.3	0.2	-	-
15.....	-	-	4e	248	52	3.0	1.1	0.5	0.3	0.2	-	-
16.....	-	-	3	213	46	3.0	1.1	0.5	0.3	0.2	-	-
17.....	-	-	2	142	39	3.3	1.1	0.5	0.3	0.2	-	-
18.....	-	-	2	137	31	3.2	1.0	0.5	0.3	0.2	-	-
19.....	-	-	2	133	28	2.8	1.0	0.5	0.3	0.2	-	-
20.....	-	-	2	129	28	2.1	1.0	0.5	0.3	0.1	-	-
21.....	-	-	4	125	23	1.8	1.0	0.5	0.3	0.3	-	-
22.....	-	-	5	121	20	1.7	0.9	0.5	0.3	0.3	-	-
23.....	-	-	6	116	17	1.6e	0.9	0.5	0.3	0.3	-	-
24.....	-	-	10e	108	17	1.5e	0.9	0.4	0.2	0.3	-	-
25.....	-	-	39	100	15	1.4	0.9	0.4	0.2	0.3	-	-
26.....	-	-	203	100	12	1.4	0.9	0.4	0.2	0.3	-	-
27.....	-	-	379	96	12	1.4	0.9	0.4	0.2	0.3e	-	-
28.....	-	-	846	81	12	1.3	0.9	0.4	0.2	0.3e	-	-
29.....	-	-	1,160	81	15	1.3	0.9	0.4	0.2	0.3e	-	-
30.....	-	-	1,080	77	12	1.3	0.8	0.4	0.2	0.3e	-	-
31.....	-	-	1,130	-	9.2	-	0.8	0.4	-	0.2e	-	-
Mean	-	-	159e	295	33.1	3.5	1.1	0.6	0.3e	0.2	-	-
Per sq. mi.	-	-	0.017	0.031	0.004	0.000	0.000	0.000	0.000	0.000	-	-
Acre-feet	-	-	9,770	17,570	2,040	209	65	34	18	14	-	-

The Period.....Discharge: Daily - Maximum 29 March, 1,160 (elevation 1,675.25)
 (245 days) - Minimum 20 October, 0.1 (elevation 1,671.26)
 Instantaneous Maximum 2:30 a.m., 1 April, 1,310 (elevation 1,675.39)
 Mean 61.2; Per Square Mile 0.007
 Runoff: Acre-feet 29,720; Depth in inches on drainage area 0.060

e - Estimated 1 to 8, 15 to 24 March, 6 September to 3 October and as indicated.

(International Gauging Station)

Location: Lat. 48° 59' 24", long. 101° 57' 28", in NE. 1/4 sec. 33, tp. 164 N, rge. 87 W, North Dakota, three quarters of a mile south of International Boundary. Drainage Area: 9,330 square miles (revised). Gauge: Recording; elevations referred to mean sea level, datum of 1929. Measurement of Discharge: From cableway or by wading. Period of Record: March 1930 to date. Average Discharge: (24 years) - 121 cfs. Extremes Recorded: Daily - Maximum, 29 April 1948, 7,380 cfs (elevation 1,627.74 ft.), Minimum - Nil at various times; Instantaneous Maximum, 11 p.m., 28 April 1948, 7,400 cfs (elevation 1,627.80 ft.). Remarks: Records good except those for periods of ice effect or no gauge height record, which are fair. This station is maintained by the United States under agreement with Canada.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	2.4	7.7	8.8	1.6	1.3	3.0	1,370	89	21	4.3	1.7	1.1
2.....	2.8	7.7	6.3	1.4	1.3	2.5	1,370	82	21	4.6	1.7	1.0
3.....	5.7	7.7	5.9	2.4	1.3	2.5	1,250	76	21	5.2	1.5	0.9
4.....	3.2	8.2	5.9	2.3	1.2	2.5	810	67	19	6.8	1.4	1.0
5.....	3.2	8.8	5.7	1.8	1.2	2.5	650	61	15	6.8	1.2	1.7
6.....	3.7	11	5.5	2.5	1.1b	2.5	540	57	14	7.0	1.1	2.5
7.....	4.3	16	5.7	2.4	1.1	2.4	470	52	14	6.6	0.9	1.3
8.....	4.0	8.5	5.7	2.0	1.0	2.2	450	48	13	5.9	0.9	1.0
9.....	3.9	7.2	5.9	2.0	0.9	2.0	490b	44	12	5.5	1.0	0.9
10.....	6	9.1	5.2	2.0	0.9	1.8	562	43	12	5.0	1.0	0.9
11.....	8	10	4.2	2.0	0.9	1.8	521	41	11	4.8	0.8	1.5
12.....	7	11	4.5	2.1	0.9	2.0	452	44	9.7	4.3	0.6	1.6
13.....	6	12	5.2	2.2	0.8	2.0	390	48	9.7	3.9	0.5	1.5
14.....	5	12	5.0	2.2	0.7	2.1	346	46	9.4	3.6	0.6	1.4
15.....	5.0	12	4.6	1.8	0.5	2.1	306	45	8.8	3.6	0.8	1.4
16.....	4.5	12	4.3	1.8	0.5	2.1	264	53	9.4	3.4	0.9	0.8
17.....	4.0	12	4.0	1.7	0.5	2.3	232	54	10	3.3	0.7	0.4
18.....	3.7	12	4.3	1.7	0.5	2.5	203	48	9.7	3.4	0.7	0.2
19.....	3.7	12	4.3	1.7	0.5	2.9	179	41	9.4	3.4	1.1	0.1
20.....	3.7	12	4.2	1.7	0.5	3.2	167	36	9.1	3.3	1.2	0.1
21.....	3.4	11	4.2	1.8	0.5	3.6	158	35	8.2	3.1	1.3	0.1
22.....	3.2	13	4.2	1.7	0.5	3.9	152	34	8.2	2.9	1.4	0.2
23.....	3.9	14	4.0	1.6	1	4.0	145	32	8.5	2.8	1.8	0.2
24.....	6.6	12	3.9	1.6	3	4.2	140	30	8.8	2.4	1.6	0.1
25.....	6.6	12	3.7	1.6	2	5.2	131	28	7.5	2.3	1.4	0.1
26.....	5.7	10	3.3	1.7	7	50	125	26	6.8	2.4	1.1	0.1
27.....	5.5	10	3.2	1.7	6	200	118	24	6.1	2.6	1.0	0.1
28.....	5.9	10	2.3	1.5	4	400	114	24	5.7	2.5	0.9	0.1
29.....	7.0	8.2	1.6	1.4	-	750	105	21	5.2	2.4	0.9	0.1
30.....	7.5	8.5	1.5	1.4	-	1,070	98	21	5.0	2.3	0.9	0.1
31.....	7.7	-	2.0	1.3	-	1,310	-	20	-	2.0	0.9	-
Mean	4.93	10.6	4.49	1.83	1.74	124	410	44.2	10.9	3.95	1.08	0.75
Per sq. mi.	0.001	0.001	0.000	0.000	0.000	0.013	0.044	0.005	0.001	0.000	0.000	0.000
Acre-feet	303	630	276	112	96	7,630	24,410	2,720	651	243	66	45

The Year.....Discharge: Daily - Maximum 2 April, 1,370
 - Minimum 19 to 21, 24 to 30 September 0.1
 Instantaneous Maximum 9 a.m., 2 April, 1,380
 Mean 51.4; Per Square Mile 0.006
 Runoff: Acre-feet 37,182; Depth in inches on drainage area 0.073

b - Ice conditions 6 February to 9 April.

(International Gauging Station)

Location: Lat. 48° 59' 47", long. 100° 57' 29", in SW. 1/4 of SE. 1/4 sec. 30, tp. 164 N., rge. 79 W., North Dakota, twelve hundred feet south of the International Boundary. Drainage Area: 17,600 square miles (approximately). Gauge: Recording; elevations referred to mean sea level, 1929 datum. Measurement of Discharge: From bridge or by wading. Period of Record: July 1929 to date (no winter records prior to 1936). Average Discharge: (23 years) - 219 cfs. Extremes Recorded: Daily - Maximum, 18 April 1949, 6,400 cfs (elevation 1,419.42 ft.), Minimum, Nil at various times. Remarks: Records good. Flow is regulated by Fish and Wildlife Service Dams on the Souris, Des Lacs and Wintering Rivers and Willow Creek. This station is maintained by the United States under agreement with Canada.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	24	98	112	14	21	0.8	2.1	9.1	122	32	28	28
2.....	25	95	112	15	21	0.6	1.2	7.5	129	32	28	26
3.....	25	98	112	15	21	0.3	1.2	6.1	115	32	32	25
4.....	23	90	112	15	21	0.1	1.3	8.8	115	32	31	26
5.....	23	98	112	15	21	0.1	0.9	11	118	32	32	25
6.....	25	105	108	15	21	0	0.6	10	115	32	32	25
7.....	22	129	108	15	21	0	0.3	11	112	32	29	25
8.....	18	125	108	15	21	0	4.4	21	108	32	29	26
9.....	18	129	108	15	20	0	14	61	108	34	29	26
10.....	18	129	81	15	21	0	12	56	105	34	30	27
11.....	18	129	43	16	20	0	9.7	63	105	32	31	25
12.....	19	129	43	16	20	0	5.5	202	105	35	28	24
13.....	19	129	43	16	19	0	5.3	68	105	34	28	20
14.....	20	125	43	16	18	0	5.7	56	108	29	26	18
15.....	20	122	41	18	18	0	6.1	61	112	32	27	15
16.....	20	122	41	18	17	0	6.8	68	112	32	28	16
17.....	21	122	41	18	17	0	6.8	58	108	32	28	17
18.....	22	122	34	19	16	0	7.0	54	105	32	27	17
19.....	22	122	21	20	13	0	6.3	56	101	34	27	18
20.....	22	122	13	20	6.1	0	6.1	65	90	35	29	17
21.....	22	122	13	20	4.6	0	6.6	68	61	31	29	16
22.....	21	122	13	20	3.9	0	6.6	65	56	32	30	18
23.....	16	122	13	20	3.1	0	7.5	78	43	34	30	18
24.....	12	122	13	21	3.1	0	9.1	65	30	35	31	18
25.....	12	122	13	20	2.7	0	11	70	30	35	29	21
26.....	13	122	13	20	2.1	0.3	15	65	30	34	28	21
27.....	14	115	14	20	1.5	0.8	16	73	30	34	26	21
28.....	15	115	14	20	1.1	1.1	13	122	30	34	26	21
29.....	15	115	14	21	-	1.0	12	125	32	34	27	20
30.....	30	115	14	21	-	2.9	10	129	32	34	27	20
31.....	98	-	14	20	-	3.8	-	112	-	31	28	-
Mean	22.3	118	51.1	17.7	14.1	0.38	7.00	62.1	85.7	32.9	28.7	21.3
Per sq. mi.	0.001	0.007	0.003	0.001	0.001	0.000	0.000	0.004	0.005	0.002	0.002	0.001
Acre-feet	1,370	7,010	3,140	1,090	784	23	417	3,820	5,100	2,020	1,770	1,270

The Year.....Discharge: Daily - Maximum 12 May, 202 (elevation 1,408.86)

- Minimum 6 to 25 March, 0

Instantaneous Maximum 3 p.m., 12 May, 563 (elevation 1,409.70)

Mean 38.4; Per Square Mile 0.002

Runoff: Acre-feet 27,814; Depth in inches on drainage area 0.030

Location: Lat. 49° 36' 05", long. 99° 40' 55", in NW. 1/4 sec. 26, tp. 7, rge. 17, W. 1st Mer., Manitoba, at bridge, seven hundred feet below the P.F.R.A. Dam. Drainage Area: 24,150 square miles. Gauge: Wire-weight. Measurement of Discharge: From bridge or by wading. Period of Record: Mainly open water 1921 to 1931, 1933-34, 1940 to 1952; continuous October 1912 to 1920, 1932, 1935 to 1939 and 1953 to date. Average Discharge: (17 years) 269 cfs. Extremes Recorded: Daily - Maximum, 11 April 1949, 8,280 cfs, Minimum, Nil at various times. Remarks: Records good during open-water period; fair during ice period.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	76	113	111	10	20	108	708	228	113	65	20.1	30.4
2.....	73	117	117	11	21	116	712	221	102	65	18.0	26.8
3.....	70	113	119	11	21	111	728	216	86	68	18.7	23.6
4.....	76	119	119	11	21	98	740	211	86	81	19.4	22.2
5.....	86	119	121	11	22	90	752	202	119	74	18.7	23.6
6.....	89	114	119	12	23	73	1,030	206	138	59	18.0	22.2
7.....	90	110	116	12	24	69	1,050b	206	142	53	18.0	20.8
8.....	93	106	113	12	25	72	1,100	197	134	51	18.7	18.7
9.....	98	98	119	13	25	74	985	180	131	48	18.0	17.0
10.....	100	93	124	13	26	67	899	162	134	47	16.0	17.5
11.....	99	88	122	13	42	56	772	164	134	45	14.0	18.0
12.....	102	83b	116	12	39	46	644	155	128	47	12.4	16.0
13.....	104	90	105	11	39	38	550	148	130	60	11.8	15.0
14.....	111	99	99	12	35	34	491	141	128	67	12.4	15.0
15.....	113	100	104	12	26	33	454	134	125	79	11.8	15.0
16.....	113	104	102	13	21	32	418	139	122	70	11.5	14.0
17.....	108	108	95	13	8	31	395	149	122	61	11.8	13.0
18.....	104	111	79	13	6	30	360	172	124	56	11.8	15.0
19.....	100	114	62	14	4	25	325	170	119	54	10.6	15.0
20.....	102	117	55	14	6	21	309	155	118	51	11.2	15.0
21.....	104	116	44	15	8	19	296	166	112	45	11.5	15.0
22.....	100	116	38	16	12	18	283	178	107	40.3	12.7	15.0
23.....	102	119	33	16	18	22	276	170	105	37.6	17.0	15.5
24.....	93	122	29	16	35	27	256	151	107	34.9	22.2	15.0
25.....	74	117	26	17	77	100	238	131	110	32.2	23.6	13.0
26.....	68	114	28	17	92	240	233	122	105	34.0	25.0	12.4
27.....	73	111	26	18	124	401	223	113	91	35.8	22.9	11.2
28.....	78	108	22	18	102	560	218	102	79	33.1	22.2	10.6
29.....	90	106	16	19	-	600	223	94	78	30.4	26.8	12.1
30.....	110	105	10	19	-	640	233	116	67	25.0	32.2	16.0
31.....	116	-	10	20	-	700	-	119	-	22.2	32.2	-
Mean	94	108	77	14.0	32.9	147	530	162	113	51	17.8	17.0
Per sq. mi.	0.004	0.004	0.003	0.001	0.001	0.006	0.022	0.007	0.005	0.002	0.001	0.001
Acre-feet	5,780	6,450	4,760	859	1,830	9,030	31,540	9,950	6,740	3,120	1,090	1,010

The Year.....Discharge: Daily - Maximum 8 April, 1,100 (elevation 1,145.25)
 - Minimum 19 February, 4
 Mean 114; Per Square Mile 0.005
 Runoff: Acre-feet 82,160; Depth in inches on drainage area 0.064

b - Ice conditions 12 November to 7 April.

Location: Lat. 49° 11' 36", long. 103° 51' 58", in SW. 1/4 sec. 11, tp. 3, rge. 14, W. 2nd Mer., Saskatchewan, three miles south and two miles west of Tribune. Drainage Area: 805 square miles. Gauge: Staff. Measurement of Discharge: From bridge or by wading. Period of Record: March to October, 1957 to date (discontinued). Extremes Recorded: Daily - Maximum, 4 April 1958, 330 cfs, Minimum, Nil at various times. Remarks: Records fair. Data for open water in 1956 were obtained two miles south and three miles west of Tribune, Station No. 5NA₁.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	0b	171	0	0	0	Nil	Nil	Nil	-	-
2.....	-	-	0	188	0	0	0	"	"	"	-	-
3.....	-	-	0	324b	0	0	0	"	"	"	-	-
4.....	-	-	0	330	0	0	0	"	"	"	-	-
5.....	-	-	0	288	0	0	0	"	"	"	-	-
6.....	-	-	0	226	0	0	0	"	"	"	-	-
7.....	-	-	0	173	0	0	0	"	"	"	-	-
8.....	-	-	0	98	0	0	0	"	"	"	-	-
9.....	-	-	0	71	0	0	0	"	"	"	-	-
10.....	-	-	0	57	0	0	0	"	"	"	-	-
11.....	-	-	0	47	0	0	0	"	"	"	-	-
12.....	-	-	0	35	0	0	0	"	"	"	-	-
13.....	-	-	0	34	0	0	0	"	"	"	-	-
14.....	-	-	0	22	0	0	0	"	"	"	-	-
15.....	-	-	0	19	0	0	0	"	"	"	-	-
16.....	-	-	0	35	0	0	0	"	"	"	-	-
17.....	-	-	0	9	0	45	0	"	"	"	-	-
18.....	-	-	0	5	0	13	0	"	"	"	-	-
19.....	-	-	0	4	0	3	0	"	"	"	-	-
20.....	-	-	0	4	0	2	0	"	"	"	-	-
21.....	-	-	0	2	0	2	0	"	"	"	-	-
22.....	-	-	0	2	0	2	0	"	"	"	-	-
23.....	-	-	0	1	0	2	0	"	"	"	-	-
24.....	-	-	0	0	0	1	0	"	"	"	-	-
25.....	-	-	0	1	0	0	0	"	"	"	-	-
26.....	-	-	0	0	0	0	0	"	"	"	-	-
27.....	-	-	33	0	0	0	0	"	"	"	-	-
28.....	-	-	122	0	0	0	0	"	"	"	-	-
29.....	-	-	140	0	0	0	0	"	"	"	-	-
30.....	-	-	128	0	0	0	0	"	Nil	"	-	-
31.....	-	-	239	-	0	-	0	Nil	-	Nil	-	-
Mean	-	-	21.3	71	0.0	2.3	0.0	Nil	Nil	Nil	-	-
Per sq. mi.	-	-	0.026	0.089	0.000	0.003	0.000	Nil	Nil	Nil	-	-
Acre-feet	-	-	1,310	4,250	0	139	0	Nil	Nil	Nil	-	-

The Period.....Discharge: Daily - Maximum 4 April, 330
 (245 days) - Minimum at various times, Nil
 Mean 11.7; Per Square Mile 0.014
 Runoff: Acre-feet 5,700; Depth in inches on drainage area 0.133

b - Ice conditions 1 March to 3 April.

(International Gauging Station)

Location: Lat. 48° 58' 30", long. 103° 15' 40", in NW, 1/4 sec. 3, tp. 163 N, rge. 97W, North Dakota, at bridge, five miles northeast of Crosby. Drainage Area: 1,800 square miles. Gauge: Recording. Measurement of Discharge: From bridge or by wading. Period of Record: March to April 1943 and April 1944 to date. Average Discharge: (14 years) - 28.6 cfs. Extremes Recorded: Daily - Maximum, 23 April 1948, 6,240 cfs, Minimum, Nil at various times. Remarks: Records fair. This station is maintained by the United States under agreement with Canada.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	0	0	0	0	0	0	655	3.6	0	0	0	0
2.....	0	0	0	0	0	0	449	3.2	0	0	0	0
3.....	0	0	0	0	0	0	272	2.8	0	0	0	0
4.....	0	0	0	0	0	0	226	2.4	0	0	0	0
5.....	0	0	0	0	0	0	313	2.3	0	0	0	0
6.....	0	0	0	0	0	0	315	2.0	0	0	0	0
7.....	0	0	0	0	0	0	272	1.6	0	0	0	0
8.....	0	0	0	0	0	0	217	1.2	0	0	0	0
9.....	0	0	0	0	0	0	158	0.9	0	0	0	0
10.....	0	0	0	0	0	0	112	0.7	0	0	0	0
11.....	0	0	0	0	0	0	79	0.3	0	0	0	0
12.....	0	0	0	0	0	0	59	0	0	0	0	0
13.....	0	0	0	0	0	0	45	0	0	0	0	0
14.....	0	0	0	0	0	0	36	0	0	0	0	0
15.....	0	0	0	0	0	0	27	0	0	0	0	0
16.....	0	0	0	0	0	0	24	0	0	0	0	0
17.....	0	0	0	0	0	0	18	0	0	0	0	0
18.....	0	0	0	0	0	0	17	0	0	0	0	0
19.....	0	0	0	0	0	0	13	0	0	0	0	0
20.....	0	0	0	0	0	0	11	0	0	0	0	0
21.....	0	0	0	0	0	0	9.2	0	0	0	0	0
22.....	0	0	0	0	0	0	7.6	0	0	0	0	0
23.....	0	0	0	0	0	0	6.7	0	0	0	0	0
24.....	0	0	0	0	0	0	6.0	0	0	0	0	0
25.....	0	0	0	0	0	0	5.4	0	0	0	0	0
26.....	0	0	0	0	0	0	5.2	0	0	0	0	0
27.....	0	0	0	0	0	0	5.4	0	0	0	0	0
28.....	0	0	0	0	0	0.1	5.0	0	0	0	0	0
29.....	0	0	0	0	-	10	4.2	0	0	0	0	0
30.....	0	0	0	0	-	180	3.8	0	0	0	0	0
31.....	0	-	0	0	-	866	-	0	-	0	0	-
Mean	0	0	0	0	0	34.0	112	0.7	0	0	0	0
Per sq. mi.	0	0	0	0	0	0.019	0.062	0.004	0	0	0	0
Acre-feet	0	0	0	0	0	2,090	6,700	42.0	0	0	0	0

The Year..... Discharge: Daily - Maximum 31 March, 866
 - Minimum at many times, 0
 Instantaneous Maximum 11 a.m., 31 March, 984
 Mean 12.2; Per Square Mile 0.007
 Runoff: Acre-feet 8,832; Depth in inches on drainage area 0.096

SHORT CREEK NEAR ROCHE PERCEE - STATION No. 5NB₈

Location: Lat. 49° 03' 45", long. 102° 49' 05", in SE. 1/4 sec. 25, tp. 1, rge. 7, W. 2nd Mer., Saskatchewan, at bridge, one mile south of Roche Percee. Drainage Area: 562 square miles. Gauge: Staff. Measurement of Discharge: From bridge or by wading. Period of Record: March to October, 1956 to date. Extremes Recorded: Daily - Maximum, 22 March 1956, 130 cfs, Minimum, Nil at various times. Remarks: Records good during open-water period; fair during ice period.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	Nil b	60	0	Nil	Nil	Nil	Nil	Nil	-	-
2.....	-	-	"	58	0	"	"	"	"	"	-	-
3.....	-	-	"	55	0	"	"	"	"	"	-	-
4.....	-	-	"	27	0	"	"	"	"	"	-	-
5.....	-	-	"	19	0	"	"	"	"	"	-	-
6.....	-	-	"	13	0	"	"	"	"	"	-	-
7.....	-	-	"	10	0	"	"	"	"	"	-	-
8.....	-	-	"	7e	0	"	"	"	"	"	-	-
9.....	-	-	"	5	0	"	"	"	"	"	-	-
10.....	-	-	"	4	0	"	"	"	"	"	-	-
11.....	-	-	"	4	0	"	"	"	"	"	-	-
12.....	-	-	"	3e	0	"	"	"	"	"	-	-
13.....	-	-	"	3e	0	"	"	"	"	"	-	-
14.....	-	-	"	2e	0	"	"	"	"	"	-	-
15.....	-	-	"	2e	0	"	"	"	"	"	-	-
16.....	-	-	"	2	0	"	"	"	"	"	-	-
17.....	-	-	"	2	0	"	"	"	"	"	-	-
18.....	-	-	"	1	0	"	"	"	"	"	-	-
19.....	-	-	"	1	0	"	"	"	"	"	-	-
20.....	-	-	"	1	0	"	"	"	"	"	-	-
21.....	-	-	"	0	0	"	"	"	"	"	-	-
22.....	-	-	"	0e	0	"	"	"	"	"	-	-
23.....	-	-	"	0	0	"	"	"	"	"	-	-
24.....	-	-	Nil	0	0	"	"	"	"	"	-	-
25.....	-	-	4	0	0	"	"	"	"	"	-	-
26.....	-	-	17	0	0	"	"	"	"	"	-	-
27.....	-	-	21	0	0	"	"	"	"	"	-	-
28.....	-	-	29	0	0	"	"	"	"	"	-	-
29.....	-	-	68	0	0	"	"	"	"	"	-	-
30.....	-	-	79b	0	0	Nil	"	"	Nil	"	-	-
31.....	-	-	89	-	0	-	Nil	Nil	-	Nil	-	-
Mean	-	-	9.9	9.3	0.0	Nil	Nil	Nil	Nil	Nil	-	-
Per sq. mi.	-	-	0.018	0.016	0.000	Nil	Nil	Nil	Nil	Nil	-	-
Acre-feet	-	-	609	553	0	Nil	Nil	Nil	Nil	Nil	-	-

The Period..... Discharge: Daily - Maximum 31 March, 89 (elevation 1,734.84)
(245 days) - Minimum at many times, Nil

Mean 2.4; Per Square Mile 0.004

Runoff: Acre-feet 1,160; Depth in inches on drainage area 0.039

b - Ice conditions 1 to 30 March.

e - Estimated.

Location: Lat. 49° 14' 00", long. 102° 13' 25", in SW. 1/4 sec. 28, tp. 3, rge. 2, W. 2nd Mer., Saskatchewan, two and one-half miles west of Oxbow. Drainage Area: 1,900 square miles. Gauge: Wire-weight; recording from July 1958; elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. Measurement of Discharge: From cableway or by wading. Period of Record: March to October, 1956 to date. Extremes Recorded: Daily - Maximum, 12 April 1956, 2,390 cfs (elevation 1,707.06 ft.), Minimum, Nil at various times. Remarks: Records good during open-water period; fair during ice period. Data for open water September 1913 to October 1917 and 1933 to 1955 were obtained at bridge, one and one-quarter miles southwest of Oxbow, Station No. 5ND₂.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	Nil b	958	55	2.7	0.2	Nil	Nil	Nil	-	-
2.....	-	-	"	607	54	2.7	0.2	"	"	"	-	-
3.....	-	-	"	602	42	2.6	0.2	"	"	"	-	-
4.....	-	-	"	548	40	2.6	0.1	"	"	"	-	-
5.....	-	-	"	464	38	2.5	0.1	"	"	"	-	-
6.....	-	-	"	410	25	2.5	0.5	"	"	"	-	-
7.....	-	-	"	410b	24	2.4	0.4	"	"	"	-	-
8.....	-	-	"	360	20	2.3	0.4	"	"	"	-	-
9.....	-	-	"	312	18	2.3	0.3	"	"	"	-	-
10.....	-	-	"	249	14	2.2	0.2	"	"	"	-	-
11.....	-	-	"	225	14	2.3	0.2	"	"	"	-	-
12.....	-	-	"	192	14	2.2	0.1	"	"	"	-	-
13.....	-	-	"	178	14	2.2	0.1	"	"	"	-	-
14.....	-	-	"	168	13	2.2	0.3	"	"	"	-	-
15.....	-	-	"	145	14	1.6	0.2	"	"	"	-	-
16.....	-	-	"	145	14	1.2	0.2	"	"	"	-	-
17.....	-	-	"	93	12	1.2	0.1	"	"	"	-	-
18.....	-	-	"	85	13	1.1	0.1	"	"	"	-	-
19.....	-	-	"	118	6.5	1.0	0.1	"	"	"	-	-
20.....	-	-	"	90	4.7	1.0	0.1	"	"	Nil	-	-
21.....	-	-	"	67	5.2	1.0	0.1	"	"	0.1	-	-
22.....	-	-	"	78	4.7	0.8	0.1	"	"	0.1	-	-
23.....	-	-	"	78	4.7	0.7	0.1	"	"	0.1	-	-
24.....	-	-	Nil	62	4.7	0.7	0.1	"	"	0.1	-	-
25.....	-	-	5	64	4.3	0.7	0.0	"	"	0.0	-	-
26.....	-	-	100	66	4.7	0.6	0.0	"	"	0.0	-	-
27.....	-	-	401	70	4.5	0.5	0.0	"	"	0.0	-	-
28.....	-	-	746	55	3.8	0.4	0.0	"	"	0.0	-	-
29.....	-	-	684	55	3.6	0.4	0.0	"	"	0.0	-	-
30.....	-	-	801	48	3.1	0.3	0.0	"	"	0.0	-	-
31.....	-	-	1,260	-	2.9	-	0.0	Nil	-	0.0	-	-
Mean	-	-	129	233	16.0	1.6	0.1	Nil	Nil	0.0	-	-
Per sq. mi.	-	-	0.068	0.123	0.008	0.001	0.000	0.000	0.000	0.000	-	-
Acre-feet	-	-	7,940	13,890	983	93	9	Nil	Nil	3	-	-

The Period..... Discharge: Daily - Maximum 31 March, 1,260
 (245 days) - Minimum at various times, Nil
 Mean 47.1; Per Square Mile 0.025
 Runoff: Acre-feet 22,920; Depth in inches on drainage area 0.227

b - Ice conditions 1 March to 7 April.

ANTLER RIVER NEAR MELITA - STATION No. 5NF₂

Location: Lat. 49° 03' 34", long. 101° 02' 56", in NE. 1/4 sec. 20, tp. 1, rge. 27, W. 1st Mer., Manitoba, at bridge on Highway No. 83, one and one-half miles west and fourteen miles south of Melita. Drainage Area: 1,221 square miles. Gauge: Staff. Measurement of Discharge: From bridge or by wading. Period of Record: Mainly open water September 1935 to June 1936 and 1943 to date. Extremes Recorded: Daily - Maximum, 26 April 1948, 2,610 cfs, Minimum, Nil at various times. Remarks: Records good during open-water period; fair during ice period.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	Nil b	597	17	1.0	Nil	Nil	Nil	Nil	-	-
2.....	-	-	"	551b	16	1.6	"	"	"	"	-	-
3.....	-	-	"	615	15	0	"	"	"	"	-	-
4.....	-	-	"	624	15	0	"	"	"	"	-	-
5.....	-	-	"	567	14	0	"	"	"	"	-	-
6.....	-	-	"	429e	14	0	"	"	"	"	-	-
7.....	-	-	"	291	14	0	"	"	"	"	-	-
8.....	-	-	"	221	13	0	"	"	"	"	-	-
9.....	-	-	"	168	13	0	"	"	"	"	-	-
10.....	-	-	"	142	12	0	"	"	"	"	-	-
11.....	-	-	"	104	10	0	"	"	"	"	-	-
12.....	-	-	"	84	10	0	"	"	"	"	-	-
13.....	-	-	"	62	9.3	0	"	"	"	"	-	-
14.....	-	-	"	58	8.9	0	"	"	"	"	-	-
15.....	-	-	"	50	8.5	0	"	"	"	"	-	-
16.....	-	-	"	44	8.2	0	"	"	"	"	-	-
17.....	-	-	"	37	7.6	0	"	"	"	"	-	-
18.....	-	-	"	36	7.1	0	"	"	"	"	-	-
19.....	-	-	"	33	6.6	0	"	"	"	"	-	-
20.....	-	-	"	33	6.4	0	"	"	"	"	-	-
21.....	-	-	"	26	6.2	0	"	"	"	"	-	-
22.....	-	-	"	25	6.2	0	"	"	"	"	-	-
23.....	-	-	"	24	5.7	0	"	"	"	"	-	-
24.....	-	-	0	23	5.5	0	"	"	"	"	-	-
25.....	-	-	0	21	5.3	0	"	"	"	"	-	-
26.....	-	-	4.7	20	5.1	0	"	"	"	"	-	-
27.....	-	-	7.3	20	3.5	Nil	"	"	"	"	-	-
28.....	-	-	24	19	2.6	"	"	"	"	"	-	-
29.....	-	-	83	18	1.6	"	"	"	"	"	-	-
30.....	-	-	134	18	1.2	Nil	"	"	Nil	"	-	-
31.....	-	-	509	-	0.8	-	Nil	Nil	-	Nil	-	-
Mean	-	-	24.6	165	8.2	0.1	Nil	Nil	Nil	Nil	-	-
Per sq. mi.	-	-	0.020	0.135	0.007	0.000	Nil	Nil	Nil	Nil	-	-
Acre-feet	-	-	1,520	9,730	534	5	Nil	Nil	Nil	Nil	-	-

The Period..... Discharge: Daily - Maximum 4 April, 624
(245 days) - Minimum at many times, Nil

Mean 24.4; Per Square Mile 0.019

Runoff: Acre-feet 11,800; Depth in inches on drainage area 0.182

b - Ice conditions 1 March to 2 April.

e - Estimated.

Location: Lat. 49° 05' 45", long. 101° 11' 00", at west boundary of SW. 1/4 sec. 4, tp. 2, rge. 28, W. 1st Mer., Manitoba, two miles north of Lyleton. Drainage Area: 462 square miles. Gauge: Staff. Measurement of Discharge: From bridge or by wading. Period of Record: March to October, 1956 to date. Extremes Recorded: Daily - Maximum, 19 April 1956, 717 cfs, Minimum, Nil at various times. Remarks: Records good. Data for open water September 1935 to June 1936 and 1943 to 1955 were published under title "near Melita", Station No. 5NF₃.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	0	74	6.0	0.4	0	Nil	Nil	Nil	-	-
2.....	-	-	0	60	5.6	0.4	0	"	"	"	-	-
3.....	-	-	0	141	5.2	0.3	0	"	"	"	-	-
4.....	-	-	0	338	4.8	0.3	0	"	"	"	-	-
5.....	-	-	0	222	4.8	0.1	0	"	"	"	-	-
6.....	-	-	0	160	4.5	0.1	0	"	"	"	-	-
7.....	-	-	0	123	4.2	0.1	0	"	"	"	-	-
8.....	-	-	0	101	3.8	0.1	0	"	"	"	-	-
9.....	-	-	0	80	3.5	0.1	0	"	"	"	-	-
10.....	-	-	0	65	3.2	0.1	0	"	"	"	-	-
11.....	-	-	0	55	3.0	0.1	0	"	"	"	-	-
12.....	-	-	0	46	2.7	0.1	0	"	"	"	-	-
13.....	-	-	0	38	2.7	0	0	"	"	"	-	-
14.....	-	-	0	31	2.5	0	0	"	"	"	-	-
15.....	-	-	0	26	2.5	0	0	"	"	"	-	-
16.....	-	-	0	23	2.2	0	0	"	"	"	-	-
17.....	-	-	0	20	2.2	0	0	"	"	"	-	-
18.....	-	-	0	17	2.0	0	0	"	"	"	-	-
19.....	-	-	0	15	1.8	0	0	"	"	"	-	-
20.....	-	-	0	12	1.8	0	0	"	"	"	-	-
21.....	-	-	0	11	1.6	0	0	"	"	"	-	-
22.....	-	-	0	9.3	1.6	0	0	"	"	"	-	-
23.....	-	-	0	8.6	1.3	0	0	"	"	"	-	-
24.....	-	-	8.8	8.2	1.3	0	0	"	"	"	-	-
25.....	-	-	16	8.0	1.2	0	0	"	"	"	-	-
26.....	-	-	14	7.6	1.1	0	0	"	"	"	-	-
27.....	-	-	70	7.8	1.1	0	0	"	"	"	-	-
28.....	-	-	80	6.8	0.9	0	0	"	"	"	-	-
29.....	-	-	138	6.6	0.7	0	0	"	"	"	-	-
30.....	-	-	136	6.0	0.6	0	0	"	Nil	"	-	-
31.....	-	-	93	-	0.6	-	0	Nil	-	Nil	-	-
Mean	-	-	17.9	57.6	2.6	0.7	0.0	Nil	Nil	Nil	-	-
Per sq. mi.	-	-	0.039	0.125	0.006	0.002	0.000	Nil	Nil	Nil	-	-
Acre-feet	-	-	1,100	3,420	161	4	0	Nil	Nil	Nil	-	-

The Period..... Discharge: Daily - Maximum 4 April, 338
 (245 days) - Minimum at various times, Nil
 Mean 9.7; Per Square Mile 0.021
 Runoff: Acre-feet 4,680; Depth in inches on drainage area 0.192

GRAHAM CREEK NEAR MELITA - STATION No. 5NF₈

Location: Lat. 49° 15' 50", long. 100° 59' 45", Manitoba, one-half mile southwest of Melita at bridge on Highway No. 3. Drainage Area: 355 square miles. Gauge: Staff. Measurement of Discharge: From bridge or by wading. Period of Record: March to October, 1958 to date. Extremes Recorded: Daily - Maximum, 29 March 1958, 80 cfs, Minimum, Nil at various times. Remarks: Records fair. This station replaces Station No. 5NF₄ which was discontinued in October 1957.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	Nil b	48	0.4	Nil	Nil	Nil	Nil	Nil	-	-
2.....	-	-	"	33	0.5	"	"	"	"	"	-	-
3.....	-	-	"	27	0.9	"	"	"	"	"	-	-
4.....	-	-	"	19	1.6	"	"	"	"	"	-	-
5.....	-	-	"	15	0.9	"	"	"	"	"	-	-
6.....	-	-	"	13	0.9	"	"	"	"	"	-	-
7.....	-	-	"	11	0.7	"	"	"	"	"	-	-
8.....	-	-	"	11	0.5	"	"	"	"	"	-	-
9.....	-	-	"	9.0	0.4	Nil	"	"	"	"	-	-
10.....	-	-	"	6.5	0.3	0.1	"	"	"	"	-	-
11.....	-	-	"	5.8	0.3	0	"	"	"	"	-	-
12.....	-	-	"	4.4	0.2	0	"	"	"	"	-	-
13.....	-	-	"	3.8	0.2	Nil	"	"	"	"	-	-
14.....	-	-	"	3.8	0.3	"	"	"	"	"	-	-
15.....	-	-	"	2.7	0.3	"	"	"	"	"	-	-
16.....	-	-	"	2.2	0.3	"	"	"	"	"	-	-
17.....	-	-	"	0.4	0.2	"	"	"	"	"	-	-
18.....	-	-	"	0.4	0.2	"	"	"	"	"	-	-
19.....	-	-	"	0.4	0.2	"	"	"	"	"	-	-
20.....	-	-	"	0.5	0.2	"	"	"	"	"	-	-
21.....	-	-	"	0.5	0.2	"	"	"	"	"	-	-
22.....	-	-	"	0.5	0.2	"	"	"	"	"	-	-
23.....	-	-	"	0.5	0.2	"	"	"	"	"	-	-
24.....	-	-	1	0.7	0.2	"	"	"	"	"	-	-
25.....	-	-	25	0.5	0.2	"	"	"	"	"	-	-
26.....	-	-	50	0.5	0.1	"	"	"	"	"	-	-
27.....	-	-	54	0.5	0.1	"	"	"	"	"	-	-
28.....	-	-	56	0.5	0.1	"	"	"	"	"	-	-
29.....	-	-	80	0.4	0.1	"	"	"	"	"	-	-
30.....	-	-	70b	0.3	0	Nil	"	"	Nil	"	-	-
31.....	-	-	52	-	0	-	Nil	Nil	-	Nil	-	-
Mean	-	-	12.5	7.4	0.4	0.0	Nil	Nil	Nil	Nil	-	-
Per sq. mi.	-	-	0.035	0.021	0.001	0.000	Nil	Nil	Nil	Nil	-	-
Acre-feet	-	-	823	472	26	0	Nil	Nil	Nil	Nil	-	-

The Period..... Discharge: Daily - Maximum 29 March, 80
(245 days) - Minimum at various times, Nil

Mean 2.5; Per Square Mile 0.007

Runoff: Acre-feet 1,320; Depth in inches on drainage area 0.064

b - Ice conditions 1 to 30 March.

Location: Lat. 50° 02' 40", long. 101° 40' 40", Saskatchewan, seven miles south of Moosomin on Highway No. 8.
 Drainage Area: 1,360 square miles. Gauge: Wire-weight. Measurement of Discharge: From bridge and by wading.
 Period of Record: March to October, 1958 to date. Extremes Recorded: Daily - Maximum, 3 April 1958, 751 cfs,
 Minimum, at various times 0 cfs. Remarks: Records fair. Controlled by Moosomin Reservoir.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	1e	337	33	0	4	4	2	18	-	-
2.....	-	-	1	709	40	0	5	4	3	20	-	-
3.....	-	-	1	751	36	0	5	3	4	24	-	-
4.....	-	-	1	695	31	1	4	3	5	26	-	-
5.....	-	-	1	578	36	1	1	2	5	27	-	-
6.....	-	-	1	411	36	0	0	2	6	28	-	-
7.....	-	-	1	284	37	0	0	2	7	29	-	-
8.....	-	-	1	224	32	0	0	2	8	29	-	-
9.....	-	-	1	189	35	0	0	2	9	30	-	-
10.....	-	-	1	152	36	0	0	2	10	30	-	-
11.....	-	-	1	147	33	1	0	2	10	30	-	-
12.....	-	-	1	112	29	1	0	2	10	30	-	-
13.....	-	-	1	95	30	0	0	2	10	31	-	-
14.....	-	-	2	88	29	1	5	2	10	31	-	-
15.....	-	-	2	82	25	1	7	2	10	31	-	-
16.....	-	-	2	77	16	1	10	2	10	30	-	-
17.....	-	-	2	89	10	1	16	1	10	27	-	-
18.....	-	-	2	67	1	2	4	1	10	25	-	-
19.....	-	-	3	85	1	2	3	1	10	21	-	-
20.....	-	-	3	65	0	2	4	1	10	18	-	-
21.....	-	-	3	67	0	3	4	1	10	16	-	-
22.....	-	-	4	62	0	3	4	1	10	13	-	-
23.....	-	-	5	64	0	3	4	1	10	11	-	-
24.....	-	-	8e	65	0	3	4	1	10	9	-	-
25.....	-	-	10	54	0	3	4	2	10	8	-	-
26.....	-	-	4	52	0	3	4	2	10	6	-	-
27.....	-	-	4	53	0	3	4	2	10	5	-	-
28.....	-	-	4	53	0	3	4	2	11	3	-	-
29.....	-	-	5	49	0	3	4	2	12	2	-	-
30.....	-	-	9	44	0	3	4	2	14	1	-	-
31.....	-	-	32	-	0	-	4	2	-	0	-	-
Mean	-	-	3.8e	193	16.9	1.5	3.6	1.9	8.9	19.7	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	232	11,500	1,040	87	222	119	528	1,210	-	-

The Period..... Discharge: Daily - Maximum 3 April, 751
 (245 days) - Minimum at various times, 0
 Mean 30.8
 Runoff: Acre-feet 14,940

e - Estimated 1 to 24 March.

Controlled by Moosomin Reservoir.

PIPESTONE CREEK NEAR PIPESTONE - STATION No. 5NG₃

Location: Lat. 49° 35' 35", long. 100° 57' 40", in SE. 1/4 sec. 29, tp. 7, rge. 26, W. 1st Mer., Manitoba, at bridge, two miles north of Pipestone. Drainage Area: 1,560 square miles. Gauge: Wire-weight. Measurement of Discharge: From bridge or by wading. Period of Record: Part-year records 1935, 1936 and 1943 and continuous March, 1957 to date. Extremes Recorded: Daily - Maximum, 10 April 1943, 1,990 cfs (a miscellaneous discharge measurement of 2,840 cfs was obtained on 7 May 1955), Minimum, at various times 0 cfs. Remarks: Records good during open-water period; fair during ice period. Controlled by Moosomin Reservoir.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	102	18	4	1	0	1	148	63	3.3	2.3	1.3	0.9
2.....	98	32	4	1	0	1	104	55	2.7	2.3	1.2	0.9
3.....	75	37	4	1	0	1	270	52	2.5	2.7	1.2	0.9
4.....	81	35	4	1	0	1	498	50	2.7	6.2	1.2	0.9
5.....	75	11	3	1	0	1	710	47	2.7	6.2	1.1	0.8
6.....	75	10	3	1	0	1	635	46	2.7	5.5	1.1	0.8
7.....	83	16	3	0	0	1	573b	46	2.3	5.5	1.1	0.8
8.....	114	23	3	0	0	2	502	45	2.7	4.9	1.0	0.8
9.....	92	12	3	0	0	2	458e	45	3.3	4.9	1.0	0.8
10.....	85	10	3	0	0	2	426e	42	3.3	4.9	1.0	0.8
11.....	96	11	3	0	0	2	380e	41	3.3	4.4	0.9	0.8
12.....	101	10	3	0	0	2	342e	41	3.3	4.4	0.9e	0.8
13.....	86	11	3	0	0	2	299	44	2.3	7.4	0.9	0.7
14.....	81	10	2	0	0	2	232	42	2.3	7.4	0.9	0.7
15.....	92	10	2	0	0	3	183	41	2.7	7.4	0.9	0.7
16.....	81	11	2	0	0	3	134	39	3.0	6.2	0.9	0.7
17.....	103	10	2	0	0	3	96	35	3.0	4.9	0.9	0.7
18.....	101	9	2	0	0	4	90	32	2.6	4.4	0.9	0.7
19.....	68	8b	2	0	0	4	70	30	2.4	4.1	0.9	0.7
20.....	67	8	2	0	0	4	68	26	2.0	3.3	0.9	0.6
21.....	48	7	2	0	0	5	81	24	1.9	2.5	0.9	0.6
22.....	38	6	2	0	0	5	68	21	1.9e	2.4	0.9	0.6
23.....	22	6	2	0	0	8	68	16	1.9	2.3	0.9	0.6
24.....	10	6	2	0	0	10	68	13	2.0	2.3	0.9	0.6
25.....	8	5	2	0	0	14	68	11	2.0	2.0	0.9	0.6
26.....	7	5	2	0	0	42	68	8.1	2.3	1.9	0.9	0.6
27.....	15	5	2	0	0	114	68	7.4	2.3	1.8e	0.9	0.6
28.....	12	5	1	0	1	211	68	6.2	2.3	1.8	0.9	0.6
29.....	7	4	1	0	-	296	63	4.7	2.3	1.6	0.9	0.5
30.....	10	4	1	0	-	258	63	4.1	2.3	1.5	0.9	0.5e
31.....	13	-	1	0	-	208	-	3.8	-	1.4	0.9	-
Mean	63	11.8	2.4	0.2	0.0	39.0	230	32.0	2.5	3.9	1.0	0.7
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	3,860	704	149	12	2	2,410	13,690	1,950	151	240	60	42

The Year..... Discharge: Daily - Maximum 5 April, 710

- Minimum at various times, 0

Mean 32.1

Runoff: Acre-feet 23,270

b - Ice conditions 19 November to 7 April. *
Controlled by Moosomin Reservoir.

e - Estimated.

OAK LAKE AT OAK LAKE RESORT - STATION No. 5NG₈

149

Location: Lat. 49° 41' 40", long. 100° 42' 30", Manitoba, six miles southwest of the town of Oak Lake. Gauge: Staff; elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. Period of Record: April 1954 to date. Extremes Recorded: Daily - Maximum, 17 May 1955, 1,412.06 feet, Minimum, 16 September 1958, 1,406.63 feet. Remarks: Records supplied by Manitoba Water Resources Branch.

Daily Elevations in Feet for Water Year 1957-58

Day	June	July	Aug.	Sept.	Day	June	July	Aug.	Sept.
1.	-	-	-	-	16.	-	-	-	6.63
2.	-	-	-	6.83	17.	-	7.83	7.03	-
3.	-	-	7.23	-	18.	-	-	-	6.73
4.	-	-	-	6.83	19.	-	7.73	6.93	-
5.	-	-	7.23	-	20.	-	-	-	-
6.	-	-	-	-	21.	-	7.63	6.93	6.63
7.	-	-	7.13	6.83	22.	-	-	-	-
8.	-	-	-	-	23.	-	7.63	-	6.63
9.	-	-	-	6.83	24.	-	-	6.93	-
10.	-	7.50	7.13	-	25.	-	7.63	-	6.68
11.	-	7.47	-	6.73	26.	-	-	6.83	-
12.	-	-	7.03	-	27.	-	7.53	-	-
13.	-	7.43	-	-	28.	-	-	6.83	6.73
14.	-	-	7.03	6.73	29.	-	7.33	-	-
15.	-	7.83	-	-	30.	-	-	-	6.73
					31.	-	7.33	6.83	-

Add 1,400.00 to obtain elevation in feet, Geodetic Survey of Canada datum, 1928 adjustment.

PLUM LAKE AT FINDLAY - STATION No. 5NG₉

Location: Lat. 49° 37' 00", long. 100° 44' 15", Manitoba, four miles north of Findlay. Gauge: Staff; elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. Period of Record: April 1954 to date. Extremes Recorded: Daily - Maximum, 15 May 1955, 1,411.76 feet, Minimum, 25 September 1958, 1,405.64 feet. Remarks: Records supplied by Manitoba Water Resources Branch.

Daily Elevations in Feet for Water Year 1957-58

Day	June	July	Aug.	Sept.	Day	June	July	Aug.	Sept.
1.	-	-	-	-	16.	-	-	-	-
2.	-	-	6.42	-	17.	-	-	-	-
3.	-	6.85	-	-	18.	-	6.75	6.13	-
4.	-	-	6.42	-	19.	-	-	-	-
5.	-	6.86	-	-	20.	-	-	-	-
6.	-	-	-	-	21.	-	6.66	-	-
7.	-	6.85	6.30	-	22.	-	6.64	-	-
8.	-	-	-	-	23.	-	-	6.00	-
9.	-	-	-	-	24.	-	-	-	-
10.	-	6.75	-	-	25.	-	-	-	-
11.	-	-	-	-	26.	-	6.60	-	-
12.	-	6.75	-	-	27.	6.91	6.48	-	-
13.	-	-	-	-	28.	-	-	-	-
14.	-	6.85	6.20	-	29.	-	-	-	-
15.	-	-	-	-	30.	6.92	-	-	-
					31.	-	6.44	-	-

Add 1,400.00 to obtain elevation in feet, Geodetic Survey of Canada datum, 1928 adjustment.

PLUM CREEK NEAR SOURIS - STATION No. 5NG₇

Location: Lat. 49° 37' 20", long. 100° 18' 00", in SW. 1/4 sec. 5, tp. 8, rge. 21, W. 1st Mer., Manitoba, one mile west of Souris. Drainage Area: 2,380 square miles. Gauge: Tape-weight; elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. Measurement of Discharge: From bridge or by wading. Period of Record: April 1956 to date. Extremes Recorded: Daily - Maximum, 22 and 23 June 1956, 788 cfs (elevation 1,371.34 ft.), Minimum, Nil at various times. Remarks: Records good during open-water period; fair during ice period.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	43	65	2	0	0	2	30	117	43	9	0	Nil
2.....	43	84	2	0	0	2	45	113	39	8	0	"
3.....	43	87	1	0	0	1	50	112	32	8	0	"
4.....	41	92	1	0	0	0	55	112	23	8	0	"
5.....	41	87	1	0	0	0	58	112	24	8	0	"
6.....	41	81	1	0	0	0	60	107	26	8	Nil	"
7.....	46	68	1	0	0	1	70b	107	29	8	"	"
8.....	50	46	1	0	0	1	84	107	29	7	"	"
9.....	52	35	1	0	0	1	81	105	29	7	"	"
10.....	60	35	0	0	0	1	96	102	29	7	"	"
11.....	62	31	0	0	0	1	112	96	29	7	"	"
12.....	64	30	0	0	0	1	146	91	29	7	"	"
13.....	65	26	0	0	0	1	146	88	29	7	"	"
14.....	71	25	0	0	0	1	149	88	29	8	"	"
15.....	71	19	0	0	0	1	149	84	19	8	"	"
16.....	71	16	0	0	0	1	149	83	18	9	"	"
17.....	66	14	0	0	0	1	148	83	17	9	"	"
18.....	65	11	0	0	0	1	148	75	15	8	"	"
19.....	65	9	0	0	0	1	148	75	13	8	"	"
20.....	66	8	0	0	0	1	148	105	12	7	"	"
21.....	66	8	0	0	0	1	149	105	12	6	"	"
22.....	65	7b	0	0	0	1	149	96	12	6	"	"
23.....	65	6	0	0	0	1	146	84	12	5	"	"
24.....	46	6	0	0	0	1	127	84	11	4	"	"
25.....	23	5	0	0	10	1	127	84	10	3	"	"
26.....	32	4	0	0	10	1	127	81	8	2	"	"
27.....	39	4	0	0	40	2	127	75	8	2	"	"
28.....	46	3	0	0	5	3	124	70	8	1	"	"
29.....	60	3	0	0	-	10	120	64	8	0	"	"
30.....	65	2	0	0	-	20	117	59	9	0	"	"
31.....	65	-	0	0	-	20	-	59	-	0	Nil	-
Mean	55	30.6	0.4	0	2.3	2.6	113	91	20.4	6.0	0	Nil
Per sq. mi.	0.023	0.013	0.000	0.000	0.001	0.001	0.047	0.038	0.009	0.003	0	0
Acre-feet	3,370	1,820	22	0	129	159	6,720	5,600	1,210	367	0	0

The Year..... Discharge: Daily - Maximum 14 April, 149 (elevation 1,368.93)
- Minimum at various times, Nil
Mean 26.8; Per Square Mile 0.011
Runoff: Acre-feet 19,400; Depth in inches on drainage area 0.153

b - Ice conditions 22 November to 7 April.

OVERFLOWING RIVER AT OVERFLOWING RIVER - STATION No. 5LD₁

Location: Lat. 53° 09' 15", long. 101° 06' 30", in sec. 19, tp. 48, rge. 25, W. 1st Mer., Manitoba, near Dawson Bay, Lake Winnipegosis. Drainage Area: 1,050 square miles. Gauge: Staff. Measurement of Discharge: From bridge or by wading. Period of Record: Mainly open water 1954 to date. Extremes Recorded: Daily - Maximum, 15 to 18 May 1956, 3,140 cfs, Minimum, Nil at various times. Remarks: Records fair.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	0b	10	711	256	57	166	45	206	-	-
2.....	-	-	0	221	722	266	56	146	45	211	-	-
3.....	-	-	0	301b	711	271	52	121	45	214	-	-
4.....	-	-	0	968	691	264	54	111	44	218	-	-
5.....	-	-	0	1,110	671	258	57	105	46	224	-	-
6.....	-	-	0	1,240	666	254	121	93	44	218	-	-
7.....	-	-	0	1,270	611	241	171	79	40	211	-	-
8.....	-	-	0	896	606	221	221	76	40	371	-	-
9.....	-	-	0	752	596	216	236	71	38	382	-	-
10.....	-	-	0	740	576	206	226	67	27	414	-	-
11.....	-	-	0	611	546	196	234	64	29	442	-	-
12.....	-	-	0	591	534	188	251	57	32	466	-	-
13.....	-	-	0	580	554	168	277	53	39	506	-	-
14.....	-	-	0	570	530	166	298	50	57	502	-	-
15.....	-	-	0	566	522	154	295	45	69	502	-	-
16.....	-	-	0	646	494	141	292	40	85	494	-	-
17.....	-	-	0	651	474	128	301	34	111	450	-	-
18.....	-	-	0	656	446	121	315	33	111	466	-	-
19.....	-	-	0	776	434	117	312	21	146	446	-	-
20.....	-	-	0	800	399	101	315	21	164	422	-	-
21.....	-	-	0	872	382	99	336	21	196	442	-	-
22.....	-	-	0	950	336	85	346	30	196	378	-	-
23.....	-	-	0	938	329	81	378	39	196	368	-	-
24.....	-	-	0	944	301	81	374	38	196	354	-	-
25.....	-	-	0	896	292	69	371	38	196	332	-	-
26.....	-	-	0	836	322	69	340	37	196	312	-	-
27.....	-	-	0	800	292	69	315	38	196	301	-	-
28.....	-	-	0	800	286	53	283	40	196	286	-	-
29.....	-	-	0	776	266	57	256	44	196	271	-	-
30.....	-	-	2	770	246	57	236	45	196	266	-	-
31.....	-	-	4	-	264	-	196	44	-	251	-	-
Mean	-	-	0.2	751	478	155	244	60	107	352	-	-
Per sq. mi.	-	-	0.000	0.715	0.455	0.148	0.232	0.057	0.102	0.335	-	-
Acre-feet	-	-	12	44,700	29,380	9,250	15,020	3,700	6,380	21,670	-	-

The Period..... Discharge: Daily - Maximum 7 April, 1,270
 (245 days) - Minimum in March, 0

Mean 268; Per Square Mile 0.255

Runoff: Acre-feet 130,100; Depth in inches on drainage area 2.322

b - Ice conditions 1 March to 3 April.

RED DEER RIVER AT ERWOOD - STATION No. 5LC₁

Location: Lat. 52° 52' 00", long. 102° 11' 00", in SE. 1/4 sec. 11, tp. 45, rge. 2, W. 2nd Mer., Saskatchewan, at bridge one-quarter mile north of Erwood. Drainage Area: 4,230 square miles. Gauge: Staff. Measurement of Discharge: From bridge or by wading. Period of Record: Mainly open water May 1954 to date. Extremes Recorded: Daily - Maximum, 11 June 1954, 16,900 cfs, Minimum, 1 to 16 March 1958, 4.0 cfs. Remarks: Records good during open-water period; fair during ice period.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	4b	340	552	266	150e	88	17	242	-	-
2.....	-	-	4	365	710	340	230e	66	17	222	-	-
3.....	-	-	4	420	696	390	274e	53	11	218	-	-
4.....	-	-	4	836	675	468	250e	46	5	210	-	-
5.....	-	-	4	940b	640	432	242e	45	8	202	-	-
6.....	-	-	4	1,050	570	402	230e	42	15	242	-	-
7.....	-	-	4	1,290	570	375	390e	34	32	230	-	-
8.....	-	-	4	967	577	320	462	30	33	214	-	-
9.....	-	-	4	844	591	278	465e	27	33	170	-	-
10.....	-	-	4	828	577	250	468	24	27	246	-	-
11.....	-	-	4	752	558	218	390	23	24	330	-	-
12.....	-	-	4	710	558	218	340	22	27	380	-	-
13.....	-	-	4	696	558	214	282	20	31	350	-	-
14.....	-	-	4	675	522	198	300	16	33	345	-	-
15.....	-	-	4	626	474	214	340	14	38	340	-	-
16.....	-	-	4	558	432	206	340	12	46	340	-	-
17.....	-	-	5	570	355	202	480	11	79	345	-	-
18.....	-	-	6	844	340	170	450	10	76	345	-	-
19.....	-	-	7	940	320	130	414	12	94	345	-	-
20.....	-	-	9	1,050	300	130	355	9	103	330	-	-
21.....	-	-	11	1,190	290	124	335	9	134	310	-	-
22.....	-	-	14	1,260	286	115	278	8	162	290	-	-
23.....	-	-	17	1,130	250	109	246	7	242	282	-	-
24.....	-	-	21	1,030	210	106	198	8	282	246	-	-
25.....	-	-	25	940	202	106	178	11	375	218	-	-
26.....	-	-	32	932	194	106	170	12	365	198e	-	-
27.....	-	-	38	796	186	103	162	12	340	186e	-	-
28.....	-	-	46	703	178	103	130	13	305	162e	-	-
29.....	-	-	82	570	174	97	109	14	282	146e	-	-
30.....	-	-	270	570	214	106	103	14	242	124e	-	-
31.....	-	-	305	-	250	-	94	15	-	106e	-	-
Mean	-	-	30.7	814	420	217	286	23.5	116	255	-	-
Per sq. mi.	-	-	0.007	0.192	0.099	0.051	0.068	0.006	0.027	0.060	-	-
Acre-feet	-	-	1,890	48,440	25,800	12,880	17,560	1,440	6,900	15,700	-	-

The Period.... Discharge: Daily - Maximum 7 April, 1,290
(245 days) - Minimum 1 to 16 March, 4

Mean 269; Per Square Mile 0.064

Runoff: Acre-feet 130,600; Depth in inches on drainage area 0.577

b - Ice conditions 1 March to 5 April.

e - Estimated.

Location: Lat. 52° 52' 45", long. 101° 02' 35", in sec. 17, tp. 45, rge. 25, W. 1st Mer., Manitoba, fifteen miles north of Mafeking. Drainage Area: 5,510 square miles. Gauge: Wire-weight. Measurement of Discharge: From bridge. Period of Record: March to October, 1956 to date; miscellaneous measurements in 1954 and 1955. Extremes Recorded: Daily - Maximum, 10 May 1957, 5,840 cfs, Minimum, Nil at various times. Remarks: Records good during open-water period; fair during ice period.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	85b	162	1,020	484	351	725	366	426	-	-
2.....	-	-	85	179	1,020	476	480	642e	488	348	-	-
3.....	-	-	85	198	635	576	383	558	496	398e	-	-
4.....	-	-	85	214	690	571	405	535	460	448	-	-
5.....	-	-	85	232	695	531	377	553	374	380	-	-
6.....	-	-	85	254	695	576	655	514	496	377	-	-
7.....	-	-	90	276	690	531	655	484	386	354	-	-
8.....	-	-	90	311	576	531	735	505	412	354	-	-
9.....	-	-	90	331	645	571	745	522	412	448	-	-
10.....	-	-	90	368	720	531	745	535	267	770	-	-
11.....	-	-	90	415b	635	585	735	816	284	548	-	-
12.....	-	-	90	452	630	620	590	526	316	351	-	-
13.....	-	-	90	452	690	464	605	509	380	357	-	-
14.....	-	-	92	452	882	445	615	492	394e	448	-	-
15.....	-	-	92	456	715	480	680	484	409	509	-	-
16.....	-	-	92	480	690	480	680	396	389	620	-	-
17.....	-	-	92	810	894	476	798	548	300	535	-	-
18.....	-	-	92	790e	882	522	690	492	314	441	-	-
19.....	-	-	92	770	775	700	680	430	409	380	-	-
20.....	-	-	92	765	682e	571	690	430	484	505	-	-
21.....	-	-	92	705	590	488	680	412	531	531	-	-
22.....	-	-	93	590	600	526	675	377	665	501	-	-
23.....	-	-	93	590	590	526	705	374	630	501	-	-
24.....	-	-	93	600	595	522	900	404e	426	484	-	-
25.....	-	-	93	600	705	522	846	434	396	464	-	-
26.....	-	-	95	605	695	437	760	426	448	434	-	-
27.....	-	-	95	745	544	383	828	434	505	426	-	-
28.....	-	-	95	755	558	409	846	386	472	476	-	-
29.....	-	-	95	770	531	393	846	386	472	464	-	-
30.....	-	-	95	870	531	377	810	380	412	434	-	-
31.....	-	-	130	-	580	-	735	351	-	405	-	-
Mean	-	-	92	507	690	510	675	486	426	455	-	-
Per sq. mi.	-	-	0.017	0.092	0.125	0.093	0.123	0.088	0.077	0.083	-	-
Acre-feet	-	-	5,660	30,140	42,410	30,360	41,500	29,870	25,370	28,000	-	-

The Period..... Discharge: Daily - Maximum 1 and 2 May, 1,020 (elevation 832.98)
(245 days) - Minimum 1 to 6 March, 85

Mean 480; Per Square Mile 0.087

Runoff: Acre-feet 233,300; Depth in inches on drainage area 0.797

b - Ice conditions 1 March to 11 April.

e - Estimated.

ETOMAMI RIVER NEAR RESERVE - STATION No. 5LB₁

Location: Lat. 52° 29' 00", long. 102° 37' 45", in sec. 34, tp. 40, rge. 5, W. 2nd Mer., Saskatchewan, at traffic bridge one-quarter mile west of Highway No. 9. Drainage Area: 435 square miles. Gauge: Staff. Measurement of Discharge: From cableway or by wading. Period of Record: March to October, 1955 to date. Extremes Recorded: Daily - Maximum, 8 May 1955, 2,500 cfs, Minimum, at various times 0 cfs. Remarks: Records good during open-water period; fair during ice period.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	1b	16	52	18	5	2	$\frac{1}{2}$	$\frac{2}{2}$	-	-
2.....	-	-	$\frac{1}{2}$	$\frac{16}{56}$	34	6	2	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{2}{2}$	-	-
3.....	-	-	1	23	$\frac{51}{50}$	10	2e	1	2	2	-	-
4.....	-	-	1	23	54	$\frac{42}{50b}$	11	2	1	2	-	-
5.....	-	-	1	70	50b	35	18	2	1	2	-	-
6.....	-	-	1	75	49	25	18	2	1	2	-	-
7.....	-	-	2	70	47	24	29	2	1	2	-	-
8.....	-	-	2	43	40	25	40	2	1e	3	-	-
9.....	-	-	2	43	35	17	$\frac{48}{25}$	2	1	2	-	-
10.....	-	-	2	43	30	12	25	2	1	2	-	-
11.....	-	-	2	28	31	12	17	2	1	2	-	-
12.....	-	-	2	24	30	8	11	2	1	2	-	-
13.....	-	-	3	23	27	5	11	2	1	3	-	-
14.....	-	-	3	22	25	5	10	2	1	3	-	-
15.....	-	-	3	21	23	5	10	2	1	3	-	-
16.....	-	-	3	25	20	$\frac{4}{5}$	7	2	1	4	-	-
17.....	-	-	3	34	18	$\frac{4}{5}$	7	1e	1	4	-	-
18.....	-	-	3	48	17	5	4	1	1	4	-	-
19.....	-	-	3	67	16	5	5	0	1	4	-	-
20.....	-	-	4	87	15	10	3	$\frac{1}{2}$	1	4	-	-
21.....	-	-	4	94	13	10	5	1	1	4	-	-
22.....	-	-	4	$\frac{99}{49}$	12	5	7	1	1	4	-	-
23.....	-	-	5	49	12	5	7	0	1	4	-	-
24.....	-	-	6	38	8	4	3	1	1	5	-	-
25.....	-	-	6	29	7	4	3	3	$\frac{2}{2}$	$\frac{6}{2}$	-	-
26.....	-	-	7	22	6	4	3	$\frac{4}{3}$	2	6	-	-
27.....	-	-	7	29	$\frac{5}{5}$	5	3e	$\frac{3}{3}$	2	6	-	-
28.....	-	-	8	36	5	4	3	3	2	6	-	-
29.....	-	-	8	40	10	5	3	2	2	6	-	-
30.....	-	-	8	48	16	5	2	2	2	6	-	-
31.....	-	-	8	-	18	-	$\frac{2}{2}$	1	-	5	-	-
Mean	-	-	3.7	42.8	25.7	13.2	10.8	1.8	1.2	3.6	-	-
Per sq. mi.	-	-	0.009	0.098	0.059	0.030	0.025	0.004	0.003	0.008	-	-
Acre-feet	-	-	226	2,550	1,580	785	666	111	71	222	-	-

The Period..... Discharge: Daily - Maximum 22 April, 99
 (245 days) - Minimum 19 and 23 August, 0e
 Mean 12.8; Per Square Mile 0.029
 Runoff: Acre-feet 6,210; Depth in inches on drainage area 0.266

b - Ice conditions 1 March to 5 May.

e - Estimated 27 July to 3 August and 17 August to 8 September.

Location: Lat. 52° 35' 30", long. 102° 33' 50", in NE. 1/4 sec. 6, tp. 41, rge. 4, W. 2nd Mer., Saskatchewan, at bridge on Highway No. 23. Drainage Area: 749 square miles. Gauge: Staff. Measurement of Discharge: From cableway or by wading. Period of Record: March to October, 1955 to date. Extremes Recorded: Daily - Maximum, 24 April 1957, 3,210 cfs, Minimum, at various times, 0 cfs. Remarks: Records good during open-water period; fair during ice period.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	2b	26	84	24	16	9	2	6	-	-
2.....	-	-	2	55	81	46	15	8	2	6	-	-
3.....	-	-	2	75	92	65	14	8	3	8	-	-
4.....	-	-	2	101	100	94	15	8	2	9	-	-
5.....	-	-	2	110	89	65	20	8	2	11	-	-
6.....	-	-	2	105	70	52	23	7	2	12	-	-
7.....	-	-	2	100	68	43	29	7	1	13	-	-
8.....	-	-	2	94	58	35	46	6	0	19	-	-
9.....	-	-	2	90	52	28	44	5	0	22	-	-
10.....	-	-	2	85b	46	25	40	4	0	25	-	-
11.....	-	-	2	81	47	23	31	3	0	24	-	-
12.....	-	-	2	56	47	21	26	2	0	21	-	-
13.....	-	-	2	45	45	20	22	2	2	19	-	-
14.....	-	-	2	43	44	18	21	2	4	17	-	-
15.....	-	-	3	32	43	16	20	2	4	15	-	-
16.....	-	-	3	35	38	15	22	1	4	15	-	-
17.....	-	-	4	44	33	14	21	1	4	14	-	-
18.....	-	-	4	58	30	13	20	0	3	14	-	-
19.....	-	-	5	77	27	12	19	1	3	13	-	-
20.....	-	-	5	97	24	11	19	2	4	13	-	-
21.....	-	-	6	117	21	12	18	2	5	13	-	-
22.....	-	-	6	103	20	14	17	2	5	12	-	-
23.....	-	-	7	73	19	13	16	1	4	12	-	-
24.....	-	-	7	56	21	24	15	3	4	12	-	-
25.....	-	-	8	45	20	31	14	5	4	11	-	-
26.....	-	-	11	35	20	27	10	5	4	11	-	-
27.....	-	-	11	35	21	19	10	4	5	10	-	-
28.....	-	-	13	38	20	16	10	4	5	10	-	-
29.....	-	-	15	37	21	15	10	3	5	9	-	-
30.....	-	-	16	47	23	14	10	3	5	9	-	-
31.....	-	-	17	-	27	-	9	2	-	8	-	-
Mean	-	-	5.5	66	43.6	27.5	20.1	3.9	2.9	13.3	-	-
Per sq. mi.	-	-	0.007	0.088	0.058	0.037	0.027	0.005	0.004	0.018	-	-
Acre-feet	-	-	335	3,960	2,680	1,640	1,230	238	175	819	-	-

The Period..... Discharge: Daily - Maximum 21 April, 117
 (245 days) - Minimum in August and September, 0
 Mean 22.8; Per Square Mile 0.030
 Runoff: Acre-feet 11,080; Depth in inches on drainage area 0.276

b - Ice conditions 1 March to 10 April.

STEEPROCK RIVER NEAR MAFEKING - STATION No. 5LF₁

Location: Lat. 52° 43' 40", long. 101° 06' 45", in SW. 1/4 sec. 25, tp. 43, rge. 26, W. 1st Mer., Manitoba, at bridge on Highway No. 10. Drainage Area: 145 square miles. Gauge: Staff. Measurement of Discharge: From bridge or by wading. Period of Record: Mainly open water April 1954 to date. Extremes Recorded: Daily - Maximum, 6 July 1958, 4,880 cfs, Minimum, March and April, 1957, 2 cfs. Remarks: Records fair.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	13b	28	95	106	51	61	39	87	-	-
2.....	-	-	13	43	82	109	54	60	40	102	-	-
3.....	-	-	13	46	82	103	60	58	41	44	-	-
4.....	-	-	13	40b	81	102	310	58	39	65	-	-
5.....	-	-	13	44	83	97	2,590e	45	39	65	-	-
6.....	-	-	13	47	106	85	4,880	35	39	65	-	-
7.....	-	-	13	40	136	83	1,450	24	39	65	-	-
8.....	-	-	13	60	142	90	780	18	40	65	-	-
9.....	-	-	14	65	155	88	255	13	39	67	-	-
10.....	-	-	14	60	142	77	181	23	39	65	-	-
11.....	-	-	14	56	126	69	183	27	40	63	-	-
12.....	-	-	14	52	126	64	149	26	39	63	-	-
13.....	-	-	14	65	109	52	145	26	44	60	-	-
14.....	-	-	14	108	97	49	189	24	59	60	-	-
15.....	-	-	14	138	94	42	165	25	352	60	-	-
16.....	-	-	14	108	85	38	127	26	175	63	-	-
17.....	-	-	14	159	80	38	127	26	87	65	-	-
18.....	-	-	14	106	73	39	112	26	68	65	-	-
19.....	-	-	15	136	72	46	106	26	44	81	-	-
20.....	-	-	15	121	69	47	80	27	46	76	-	-
21.....	-	-	15	106	63	39	80	28	47	70	-	-
22.....	-	-	15	96	56	35	69	28	74	62	-	-
23.....	-	-	17	82	54	36	75	51	72	52	-	-
24.....	-	-	20	94	79	42	80	38	72	44	-	-
25.....	-	-	22	110	112	40e	80	36	44	38	-	-
26.....	-	-	24	109	106	38e	77	34	70	37	-	-
27.....	-	-	26	115	103	37e	77	33	65	37	-	-
28.....	-	-	29	112	103	36	77	32	62	35	-	-
29.....	-	-	34	109	104	39	75	35	65	35	-	-
30.....	-	-	31	109	106	39	65	36	87	30	-	-
31.....	-	-	22	-	115	-	65	38	-	33	-	-
Mean	-	-	17.1	85	98	60	413	33.6	67	59	-	-
Per sq. mi.	-	-	0.118	0.586	0.676	0.414	2,848	0.232	0.462	0.407	-	-
Acre-feet	-	-	1,050	5,090	6,020	3,580	25,420	2,070	3,980	3,610	-	-

The Period.....Discharge: Daily - Maximum 6 July, 4,880
(245 days) - Minimum 9 August, 13

Mean 105; Per Square Mile 0.724

Runoff: Acre-feet 50,820; Depth in inches on drainage area 6.565

b - Ice conditions 1 March to 4 April.

BELL LAKE AT CONTROL DAM - STATION No. 5LF₃

Location: Lat. 52° 32' 25", long. 101° 14' 10", Manitoba, approximately ten miles west of Bellsite. Gauge: Recording; elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. Period of Record: June 1957 to date. Extremes Recorded: Maximum, 16 July 1957, 2,238.35 feet, Minimum, 13 August 1957, 2,236.04 feet. Remarks: Records supplied by Manitoba Water Resources Branch.

Daily Elevations in Feet for Water Year 1957-58

Day	July	Aug.	Day	July	Aug.	Day	July	Aug.
1.....	8.02	-	11.....	12.45	-	21.....	12.01	-
2.....	-	10.84	12.....	12.43	-	22.....	12.91	-
3.....	-	-	13.....	-	9.96	23.....	11.83	-
4.....	-	-	14.....	12.45	-	24.....	11.73	-
5.....	8.89	-	15.....	-	-	25.....	11.63	-
6.....	11.09	-	16.....	12.35	-	26.....	11.50	-
7.....	11.59	-	17.....	12.28	-	27.....	-	-
8.....	11.92	10.30	18.....	12.26	-	28.....	-	-
9.....	12.32	-	19.....	12.09	-	29.....	-	-
10.....	12.60	-	20.....	-	-	30.....	-	-
						31.....	11.00	-

Add 2,220.00 to obtain elevation in feet, Geodetic Survey of Canada datum, 1928 adjustment.

Location: Lat. 52° 35' 38", long. 101° 04' 49", in NW. 1/4 sec. 1, tp. 42, rge. 26, W. 1st Mer., Manitoba, at bridge on Highway No. 10, one mile west of Bellsite. Drainage Area: 59 square miles. Gauge: Recording. Measurement of Discharge: From bridge or by wading. Period of Record: Mainly open water April 1954 to date. (Gauge located at Canadian National Railways bridge one mile downstream, 1956 and 1957). Extremes Recorded: Daily - Maximum, 6 July 1958, 1,620 cfs, Minimum, August and September 1955 and March 1958, 6 cfs. Remarks: Records fair.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	6b	13	45	37	22	60	19	28	-	-
2.....	-	-	6	13	44	38	21	58e	19	27	-	-
3.....	-	-	6	15	43	44	19	47	18	27	-	-
4.....	-	-	6	15	40	45	18	41	17	27	-	-
5.....	-	-	6	22	41	44	860	40	16	28	-	-
6.....	-	-	6	22	51	43	1,620	38	16	26	-	-
7.....	-	-	6	25	70	40	299	37	16	25	-	-
8.....	-	-	6	28	68	38	220	36	16	26	-	-
9.....	-	-	6	28	68	37	212e	36x	15	28	-	-
10.....	-	-	6	28	66	36	203x	37	15	27	-	-
11.....	-	-	6	28	62	34	166e	41	15	26	-	-
12.....	-	-	6	26	57	32	129	38	15	25	-	-
13.....	-	-	6	41	55	30	156e	36	18	25	-	-
14.....	-	-	6	55	51	29	183	36	19	25	-	-
15.....	-	-	6	53	48	27	143	33	24	25	-	-
16.....	-	-	6	45	44	25	135e	31	25	24	-	-
17.....	-	-	6	59	41	23	125	30	23	23	-	-
18.....	-	-	6	55	41	22	120	28	22	23	-	-
19.....	-	-	6	51	38	22	108	27	21	23	-	-
20.....	-	-	6	57	35	22	105	26	20	22	-	-
21.....	-	-	6	53	33	19	103	22	23	21	-	-
22.....	-	-	6	48	32	17	100	22	22	21	-	-
23.....	-	-	6	44	30	17	98	28	21	22	-	-
24.....	-	-	6	43	28	18	94	22	21	22	-	-
25.....	-	-	7	44	28	18	91	21	21	21	-	-
26.....	-	-	8	47	34	16	87e	21	21	21	-	-
27.....	-	-	9	50	32	15	82	20	20	21	-	-
28.....	-	-	10	50	26	16	79	19	20	21	-	-
29.....	-	-	11b	51	26	20	72	23	27	22	-	-
30.....	-	-	11	45	34	21	66	21	30	22	-	-
31.....	-	-	11	-	37	-	66	20	-	21	-	-
Mean	-	-	6.8	38.5	43.5	28.2	187	32.1	19.8	24.0	-	-
Per sq. mi.	-	-	0.12	0.65	0.74	0.48	3.17	0.54	0.34	0.41	-	-
Acre-feet	-	-	419	2,290	2,670	1,680	11,510	1,970	1,180	1,480	-	-

The Period.... Discharge: Daily - Maximum 6 July, 1,620
(245 days) - Minimum in March, 6

Instantaneous Maximum 3 a.m., 6 July, 4,440

Mean 47.7; Per Square Mile 0.81

Runoff: Acre-feet 23,200; Depth in inches on drainage area 7.39

b - Ice conditions 1 to 29 March.

e - Estimated.

x - Staff gauge readings 10 July to 9 August.

BIRCH RIVER NEAR BIRCH RIVER - STATION No. 5LE₃

Location: Lat. 52° 22' 54", long. 101° 06' 02", in NW. 1/4 sec. 26, tp. 39, rge. 26, W. 1st Mer., Manitoba, at bridge on Highway No. 10. Drainage Area: 23 square miles. Gauge: Staff; elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. Measurement of Discharge: From bridge or by wading. Period of Record: Mainly open water April 1954 to date. Extremes Recorded: Daily - Maximum, 23 May 1954, 938 cfs (elevation 1,024.78 ft.), Minimum, March 1957 and August 1958, 4 cfs. Remarks: Records good during open-water period; fair during ice period.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	5b	6	46	35	14	7	6	10	-	-
2.....	-	-	5	6	45	37	17	7	6	10	-	-
3.....	-	-	5	7	44	40	22	7	6	10	-	-
4.....	-	-	5	10	44	42	24	7	5	10	-	-
5.....	-	-	5	12	44	36	26	7	5	10	-	-
6.....	-	-	5	14	44	31	535	6	6	10	-	-
7.....	-	-	5	16	42	26	408	6	5	10	-	-
8.....	-	-	5	18	43	21	356	6	5	10	-	-
9.....	-	-	5	20	42	21	254	6	5	10	-	-
10.....	-	-	5	22	43	19	204	6	5	10	-	-
11.....	-	-	5	24	43	17	157	7	5	10	-	-
12.....	-	-	5	26	43	16	127	6	5	10	-	-
13.....	-	-	5	27	41	14	111	6	5	10	-	-
14.....	-	-	5	29	41	13	95	5	6	11	-	-
15.....	-	-	5	30b	38	13	54	4	8	11	-	-
16.....	-	-	5	34	36	10	48	4	9	11	-	-
17.....	-	-	6	35	33	16	44	4	10	12	-	-
18.....	-	-	6	41	21	15	38	4	8	13	-	-
19.....	-	-	6	42	19	14	33	4	7	11	-	-
20.....	-	-	6	44	17	14	31	4	7	10	-	-
21.....	-	-	6	45	17	13	29	4	9	10	-	-
22.....	-	-	6	44	16	14	27	4	10	9	-	-
23.....	-	-	6	40	14	13	26	5	9	9	-	-
24.....	-	-	6	38	14	12	21	5	9	9	-	-
25.....	-	-	6	40	14	10	17	5	8	9	-	-
26.....	-	-	6	41	14	9	14	7	8	9	-	-
27.....	-	-	6	44	14	7	13	6	8	9	-	-
28.....	-	-	6	44	13	7	12	5	8	9	-	-
29.....	-	-	6	45	13	7	11	18	11	8	-	-
30.....	-	-	6	44	21	8	10	18	11	8	-	-
31.....	-	-	6	-	31	-	8	11	-	8	-	-
Mean	-	-	5.5	29.6	30.6	18.3	90	6.5	7.2	9.9	-	-
Per sq. mi.	-	-	0.24	1.29	1.33	0.80	3.91	0.28	0.31	0.43	-	-
Acre-feet	-	-	337	1,760	1,880	1,090	5,530	399	426	607	-	-

The Period..... Discharge: Daily - Maximum 6 July, 535 (elevation 1,024.64)
(245 days) - Minimum 15 to 22 August, 4

Mean 24.8; Per Square Mile 1.08

Runoff: Acre-feet 12,030; Depth in inches on drainage area 9.82

b - Ice conditions 1 March to 15 April.

Location: Lat. 52° 15' 30", long. 101° 08' 15", in SE. 1/4 sec. 17, tp. 38, rge. 26, W. 1st Mer., Manitoba, at bridge two miles north and two and three-quarters miles east of Bowsman. Drainage Area: 821 square miles. Gauge: Tape-weight. Measurement of Discharge: From bridge or by wading. Period of Record: Mainly open water April 1954 to date. Extremes Recorded: Daily - Maximum, 18 June 1954, 4,140 cfs, Minimum, August and September 1955, 1 cfs. Remarks: Records good during open-water period; fair during ice period. Data for open-water periods 1915 to 1919 were published under title "at Bowsman", Station No. 5LE₂.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	2b	3	121	81	30	81	19	11	-	-
2.....	-	-	2	4	117	100	32	72	18	14	-	-
3.....	-	-	2	4	112	100	34	64	17	14	-	-
4.....	-	-	2	5	110	102	60	57	14	17	-	-
5.....	-	-	2	26	108	104	157	48	12	18	-	-
6.....	-	-	2	49	104	106	634	41	12	19	-	-
7.....	-	-	2	155	100	106	848	36	10	18	-	-
8.....	-	-	2	169	95	97	816	33	9	19	-	-
9.....	-	-	2	153	91	89	736	31	8	19	-	-
10.....	-	-	2	146b	89	81	652	30	7	20	-	-
11.....	-	-	2	121	89	72	592	26	7	21	-	-
12.....	-	-	2	102	91	64	554	22	7	23	-	-
13.....	-	-	2	85	95	57	522	21	7	24	-	-
14.....	-	-	2	81	91	53	497	20	9	24	-	-
15.....	-	-	2	78	89	49	450	20	10	22	-	-
16.....	-	-	2	91	87	46	420	20	10	20	-	-
17.....	-	-	2	104	85	45	387	19	12	19	-	-
18.....	-	-	2	114	83	44	346	25	13	13	-	-
19.....	-	-	2	130	78	58	325	48	11	9	-	-
20.....	-	-	2	146	74	60	304	49	10	14	-	-
21.....	-	-	2	148	68	57	280	48	10	17	-	-
22.....	-	-	2	150	62	55	233	48	9	21	-	-
23.....	-	-	2	153	55	53	212	42	9	25	-	-
24.....	-	-	2	134	53	53	197	40	8	24	-	-
25.....	-	-	2	121	51	51	183	39	8	22	-	-
26.....	-	-	2	121	51	36	171	37	9	20	-	-
27.....	-	-	2	121	51	33	155	36	8	17	-	-
28.....	-	-	2	121	51	30	141	34	7	15	-	-
29.....	-	-	2	121	51	29	125	32	7	12	-	-
30.....	-	-	3	121	55	28	100	28	6	9	-	-
31.....	-	-	3	-	64	-	81	27	-	10	-	-
Mean	-	-	2.1	103	81	65	331	37.9	10.1	17.7	-	-
Per sq. mi.	-	-	0.003	0.125	0.099	0.079	0.403	0.046	0.012	0.022	-	-
Acre-feet	-	-	127	6,100	5,000	3,850	20,380	2,330	600	1,090	-	-

The Period..... Discharge: Daily - Maximum 7 July, 848
(245 days) - Minimum in March, 2

Mean 81; Per Square Mile 0.099

Runoff: Acre-feet 39,480; Depth in inches on drainage area 0.901

b - Ice conditions 1 March to 10 April.

Location: Lat. 52° 05' 45", long. 101° 15' 30", in NW. 1/4 sec. 16, tp. 36, rge. 27, W. 1st Mer., Manitoba, at Canadian National Railways bridge. Drainage Area: 1,470 square miles. Gauge: Wire-weight; elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. Measurement of Discharge: From bridge or by wading. Period of Record: October 1912 to September 1936, some winter records incomplete; and July 1950 to date. Average Discharge: (23 years) 348 cfs. Extremes Recorded: Daily - Maximum 25 April 1922, 8,460 cfs (elevation 1,092.09 ft.), Minimum, Nil at various times. Remarks: Records fair.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	57	51	30	19	13	12	153	142	21	52	52	6
2.....	53	51	29	19	13	12	184	138	62	67	52	5
3.....	49	49	28	19	12	12	412	132	65	67	52e	5
4.....	46	49	27	19	12	12	380	132	71	71	52	4
5.....	49	49	26	19	12	12	380	126	76	76	53	4
6.....	51	47	25	19	11	12	375	120	80	82	53	4
7.....	53	46	24	19	11	12	300	111	88	138	53	4
8.....	63	46	23	19	11	12	305	120e	100	145e	55	4
9.....	65	47	22	19	10	13	315	130	100	152	52	3
10.....	63	47	21	19	10	12	310	120	100	166	31e	2
11.....	61	46b	21	18	10	13	295	120	98	177	10	3
12.....	59	46	21	18	9	12	285	120	98	184	10	3
13.....	57	45	21	18	9	12	268b	120	95	205	10	4
14.....	49	45	21	18	9	12	219	120	92e	219	10	5
15.....	49	44	21	18	8	10	212	115	90	268	10	5
16.....	47	44	21	18	8	13	188	110	85	233	10	6
17.....	49	43	21	18	8	9	226	105	80	205	10	6
18.....	47	43	21	18	7	10	233	100	76	180	10	8
19.....	47	42	21	18	13	10	230	90	71	62	9	8
20.....	46	41	21	17	12	10	226	85	53	62	9	10
21.....	47	40	20	17	12	10	230	75	50	60	9	10
22.....	47	39	20	17	13	10	226	70	35	60	8	12
23.....	49	38	20	16	12	15	205	65	47	60	8	12
24.....	49	37	20	16	13	20	194	63e	50	56	8	12
25.....	51	36	20	16	14	28	191	62	53	55	7	12
26.....	53	35	20	15	14	40	184	58	71	53	7	13
27.....	53	34	20	15	12	65	177	55	76	53	7	14
28.....	51	33	20	15	12	80	163	20	50	52	7	14
29.....	51	32	20	14	-	92	163	20	50	52	6	16
30.....	47	31	20	14	-	110	142	20	50	52	6	16
31.....	47	-	20	14	-	130	-	20	-	52	6	-
Mean	52	42.5	22.1	17.4	11.1	26.8	246	93e	71	110	22	7.6
Per sq. mi.	0.035	0.029	0.015	0.012	0.008	0.018	0.167	0.063	0.048	0.075	0.015	0.005
Acre-feet	3,180	2,530	1,360	1,070	615	1,650	14,600	5,720	4,230	6,780	1,350	456

The Year.....Discharge: Daily - Maximum 3 April, 412
 - Minimum 10 September, 2 (elevation 1,085.37)
 Mean 60; Per Square Mile 0.041
 Runoff: Acre-feet 43,540; Depth in inches on drainage area 0.554

b - Ice conditions 11 November to 13 April.

e - Estimated 8 to 24 May and as indicated.

Location: Lat. 51° 49' 00", long. 100° 32' 00", in NW, 1/4 sec. 9, tp. 33, rge. 22, W. 1st Mer., Manitoba, at bridge two and one-half miles north of Pine River. Drainage Area: 84 square miles. Gauge: Recording. Measurement of Discharge: From bridge or by wading. Period of Record: Mainly open water April 1954 to date. Extremes Recorded: Daily - Maximum, 28 May 1954, 852 cfs, Minimum, Nil at various times. Remarks: Records good during open-water period; fair during ice period.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	0b	9	14	26	6	4	69	33	-	-
2.....	-	-	0x	12	18	22	7	3	66	31	-	-
3.....	-	-	0	15	19	21	8	3	54	34	-	-
4.....	-	-	0	18	20	18	9	2	44	39	-	-
5.....	-	-	0	20	19	14	20	2	34	36	-	-
6.....	-	-	0	21	18	13	323	2	26	33	-	-
7.....	-	-	0	22	18	11	379	2	22	30	-	-
8.....	-	-	0	22b	18	10	249	2	18	34	-	-
9.....	-	-	1	24	18	9	176	2	16	39	-	-
10.....	-	-	1	23	18	8	127	1	14	39	-	-
11.....	-	-	1	24	16	7	93	1	12	34	-	-
12.....	-	-	2	21	16	7	75	1	11	30	-	-
13.....	-	-	2	25	16	6	61	1	16	28	-	-
14.....	-	-	2	29	16	5	61	1	86	26	-	-
15.....	-	-	13	29	14	5	62	1	89	24	-	-
16.....	-	-	20	28	13	4	51	1	88	23	-	-
17.....	-	-	3	28	12	4	43	1	83	22	-	-
18.....	-	-	3	26	11	4	35	1	74	19	-	-
19.....	-	-	3	28	10	5	27	1	63	18	-	-
20.....	-	-	3	29	9	6	21	1	53	18	-	-
21.....	-	-	3	26	8	5	16	1	46	16	-	-
22.....	-	-	3	24	8	4	13	1	36	17	-	-
23.....	-	-	3	22	8	3	11	1	29	20	-	-
24.....	-	-	4	18	7	4	10	7	24	22	-	-
25.....	-	-	5	16	7	4	9	5	21	21	-	-
26.....	-	-	5	18	9	4	7	5	20	20	-	-
27.....	-	-	6	16	11	3	7	5	18	19	-	-
28.....	-	-	6	15	11	2	7	6	17	19	-	-
29.....	-	-	6	13	9	3	7	63	21	18	-	-
30.....	-	-	7x	18	12	5	6	93	33	18	-	-
31.....	-	-	7	-	24	-	5	75	-	17	-	-
Mean	-	-	3.5	21.3	13.8	8.1	62.3	9.5	40.1	25.7	-	-
Per sq. mi.	-	-	0.042	0.254	0.164	0.096	0.742	0.113	0.477	0.306	-	-
Acre-feet	-	-	216	1,270	847	480	3,830	585	2,390	1,580	-	-

The Period.....Discharge: Daily - Maximum 7 July, 379
 (245 days) - Minimum in March 0
 Instantaneous Maximum, 9 a.m., 6 July, 481
 Mean 23.0; Per Square Mile 0.274
 Runoff: Acre-feet 11,200; Depth in inches on drainage area 2.497

b - Ice conditions 1 March to 8 April.

x - Manual gauge readings 2 to 30 March.

Location: Lat. 51° 40' 20", long. 100° 29' 30", Manitoba, two miles northwest of Garland. Drainage Area: 39 square miles. Gauge: Recording. Measurement of Discharge: From bridge or by wading. Period of Record: Mainly open water October 1957 to date. Extremes Recorded: Daily - Maximum, 30 August 1958, 38 cfs, Minimum, 6 to 24 August 1958, Nil; Instantaneous Maximum 9 a.m., 30 August 1958, 40 cfs. Remarks: Records fair.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	8b	4	$\frac{6}{5}$	2	1	$\frac{21}{16}$	7	-	-
2.....	-	-	-	7	4	$\frac{5}{2}$	2	1	$\frac{16}{12}$	6	-	-
3.....	-	-	-	8	4	4	2	1	12	6	-	-
4.....	-	-	-	8	4	4	2	0	8	6	-	-
5.....	-	-	-	9b	4	3	4	0	6	8	-	-
6.....	-	-	-	9	4	3	19	Nil	6	8	-	-
7.....	-	-	-	8	4	3	29	"	5	8	-	-
8.....	-	-	-	8	4	2	21	"	4	$\frac{9}{9}$	-	-
9.....	-	-	-	8	4	$\frac{2}{2}$	15	"	4	$\frac{9}{8}$	-	-
10.....	-	-	-	8	4	2	10	"	4	8	-	-
11.....	-	-	-	7	4	2	7	"	$\frac{3}{4}$	7	-	-
12.....	-	-	-	6	4	2	5	"	$\frac{4}{6}$	7	-	-
13.....	-	-	-	6	4	2	4	"	6	6	-	-
14.....	-	-	-	6	4	2	4	"	8	6	-	-
15.....	-	-	-	6	4	2	4	"	9	6	-	-
16.....	-	-	-	6	4	2	4	"	10	6	-	-
17.....	-	-	-	6	4	2	3	"	10	6	-	-
18.....	-	-	-	6	4	2	3	"	10	6	-	-
19.....	-	-	-	8	4	2	3	"	10	7	-	-
20.....	-	-	-	8	4	2	2x	"	10	4	-	-
21.....	-	-	-	5	4	2	2	"	10	$\frac{3}{3}$	-	-
22.....	-	-	-	4	4	2	2	"	9	$\frac{3}{4}$	-	-
23.....	-	-	-	4	4	2	$\frac{1}{1}$	"	9	4	-	-
24.....	-	-	-	4	4	2	$\frac{1}{1}$	Nil	9	6	-	-
25.....	-	-	-	3	4	2	1	1	9	7	-	-
26.....	-	-	-	3	4	2	1	1	8	7	-	-
27.....	-	-	-	3	4	2	1	2x	8	8	-	-
28.....	-	-	-	$\frac{2}{2}$	$\frac{3}{3}$	2	1	2	8	7	-	-
29.....	-	-	-	$\frac{2}{3}$	$\frac{3}{3}$	2	1	26	7	7	-	-
30.....	-	-	-	3	3	2	1	$\frac{38}{27}$	7	7	-	-
31.....	-	-	-	-	$\frac{5}{5}$	-	1	$\frac{27}{27}$	-	7	-	-
Mean	-	-	-	6.0	3.9	2.5	5.1	3.2	8.3	6.5	-	-
Per sq. mi.	-	-	-	0.15	0.10	0.06	0.13	0.08	0.21	0.17	-	-
Acre-feet	-	-	-	355	242	147	313	198	496	401	-	-

The Period.....Discharge: Daily - Maximum 30 August, 38
(214 days) - Minimum in August, Nil

Instantaneous Maximum 9 a.m., 30 August, 40

Mean 5.1; Per Square Mile 0.13

Runoff: Acre-feet 2,150; Depth in inches on drainage area 1.03

b - Ice conditions 1 to 5 April.

x - Manual gauge readings 20 July to 27 August.

Location: Lat. 51° 47' 55", long. 100° 17' 55", in NW. 1/4 sec. 36, tp. 32, rge. 21, W. 1st Mer., Manitoba, at bridge one mile north and ten miles east of Pine River. Drainage Area: 221 square miles. Gauge: Staff. Measurement of Discharge: From bridge or by wading. Period of Record: Mainly open water April 1954 to date. Extremes Recorded: Daily - Maximum, 30 May 1954, 688 cfs, Minimum, Nil at various times. Remarks: Records fair.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	Nil b	27	9	8	3	6	29	6	-	-
2.....	-	-	"	28	9	11	5	6	30	5	-	-
3.....	-	-	"	30b	11	9	5	8	24	5	-	-
4.....	-	-	"	40	11	7	6	11	29	10	-	-
5.....	-	-	"	32	11	6	6	11	11	10	-	-
6.....	-	-	"	19	11	4	7	6	5	11	-	-
7.....	-	-	"	11	11	4	12	6	4	12	-	-
8.....	-	-	"	11	11	4	19	1	4	10	-	-
9.....	-	-	"	3	11	4	22	1	0	9	-	-
10.....	-	-	"	14	11	2	25	0	3	9	-	-
11.....	-	-	"	20	12	2	16	0	3	9	-	-
12.....	-	-	"	6	14	2	12	0	3	9	-	-
13.....	-	-	"	11	14	2	7	0	5	9	-	-
14.....	-	-	"	11	12	2	7	1	5	9	-	-
15.....	-	-	"	14	12	2	6	0	8	9	-	-
16.....	-	-	Nil	20	12	2	6	0	8	9	-	-
17.....	-	-	0	11	12	3	10	0	5	9	-	-
18.....	-	-	0	11	12	3	6	0	5	9	-	-
19.....	-	-	0	11	11	3	6	0	5	8	-	-
20.....	-	-	0	11	11	3	4	0	5	8	-	-
21.....	-	-	0	11	11	3	6	0	8	8	-	-
22.....	-	-	1	11	8	3	5	0	5	8	-	-
23.....	-	-	1	8	9	4	6	0	6	8	-	-
24.....	-	-	2	11	9	3	5	0	8	8	-	-
25.....	-	-	4	11	9	3	3	0	5	8	-	-
26.....	-	-	6	11	9	2	5	0	6	7	-	-
27.....	-	-	10	11	10	3	6	0	6	6	-	-
28.....	-	-	20	8	12	0	6	0	6	7	-	-
29.....	-	-	20	7	12	3	6	3	11	8	-	-
30.....	-	-	21	8	10	3	6	12	12	8	-	-
31.....	-	-	24	-	8	-	6	38	-	7	-	-
Mean	-	-	3.5	14.6	10.8	3.7	8.1	3.5	8.8	8.3	-	-
Per sq. mi.	-	-	0.02	0.07	0.05	0.02	0.04	0.02	0.04	0.04	-	-
Acre-feet	-	-	216	869	664	218	496	218	524	512	-	-

The Period.....Discharge: Daily - Maximum 4 April, 40
 (245 days) - Minimum in March, Nil
 Mean 7.6; Per Square Mile 0.03
 Runoff: Acre-feet 3,720; Depth in inches on drainage area 0.31

b - Ice conditions 1 March to 3 April.

Location: Lat. 51° 06' 45", long. 99° 44' 20", Manitoba, thirteen miles southeast of Dauphin on south end of Lake Dauphin. Gauge: Staff; elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. Period of Record: May 1951 to date. Extremes Recorded: Daily - Maximum, 4 July 1953, 858.07 feet, Minimum, 21 September 1958, 853.13 feet. Remarks: Records supplied by Manitoba Water Resources Branch.

Daily Elevations in Feet for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	4.19	4.09	3.98	4.00	4.00	4.03	4.12	4.28	3.95	4.00	3.94	3.50
2.....	4.17	4.07	3.97	4.00	4.00	4.03	4.16	4.28	3.95	4.02	3.93	3.50
3.....	4.17	4.05	3.97	4.00	4.00	4.02	4.18	4.29	3.25	4.02	3.88	3.35
4.....	3.86	4.03	3.97	4.00	4.00	4.00	4.20	4.29	3.37	4.03	3.83	3.38
5.....	3.86	4.03	4.01	4.00	4.00	4.00	4.22	4.31	-	4.04	3.68	3.38
6.....	4.25	4.01	4.03	4.00	3.99	4.00	4.24	4.32	4.17	4.04	3.58	3.40
7.....	4.36	3.98	4.04	4.01	3.99	4.00	4.26	4.32	4.17	4.03	3.60	3.50
8.....	4.33	3.97	4.04	4.01	3.99	4.00	4.27	4.34	4.17	4.00	3.58	3.52
9.....	4.28	3.97	4.02	4.01	3.99	4.00	4.37	4.34	4.17	3.98	3.48	3.52
10.....	4.24	3.99	4.06	4.01	3.99	4.00	4.39	4.34	4.15	3.94	-	3.54
11.....	4.14	4.01	4.00	4.02	3.99	4.01	4.39	4.33	4.15	3.90	-	3.56
12.....	4.12	4.01	3.99	4.02	3.98	4.01	4.39	4.33	4.12	3.88	-	3.58
13.....	4.08	4.01	3.99	4.01	3.98	4.01	4.40	4.32	4.09	3.88	-	3.58
14.....	4.06	4.02	3.99	4.01	3.98	4.02	4.43	4.31	4.07	3.90	-	3.62
15.....	4.06	4.02	3.98	4.00	3.98	4.02	4.45	4.29	4.07	3.90	-	3.63
16.....	4.25	4.03	3.98	4.00	3.99	4.02	4.45	4.29	4.05	3.92	-	3.56
17.....	4.15	4.03	3.97	4.00	3.99	4.02	4.47	4.29	4.03	3.92	3.48	3.48
18.....	4.18	4.03	3.97	4.00	3.99	4.03	4.51	-	4.02	3.93	3.49	3.36
19.....	4.20	3.99	3.96	-	4.00	4.03	4.51	4.29	4.01	3.93	3.50	3.32
20.....	4.21	3.95	3.96	-	4.00	4.03	-	4.30	3.98	3.93	3.50	3.30
21.....	4.23	3.87	3.95	-	4.01	4.03	-	4.31	3.98	3.93	3.49	3.13
22.....	4.28	-	3.95	-	4.01	4.03	-	4.31	3.96	3.95	3.48	3.13
23.....	4.33	-	3.96	-	4.01	4.03	-	4.31	3.96	3.95	3.48	3.15
24.....	4.33	-	3.96	-	4.00	4.04	-	4.32	3.97	3.96	3.48	3.16
25.....	4.23	-	3.98	-	4.00	4.04	-	4.24	3.98	3.96	3.48	3.16
26.....	4.13	-	3.99	4.01	4.01	4.04	-	-	3.98	3.98	3.50	3.18
27.....	4.14	4.02	3.99	4.01	4.02	4.06	-	4.20	3.98	3.98	3.52	3.18
28.....	4.13	4.00	3.99	4.00	4.02	4.06	-	4.12	4.00	3.96	3.28	3.18
29.....	4.12	3.99	3.99	4.00	-	4.09	-	4.12	3.98	3.96	3.25	3.20
30.....	4.11	3.99	3.99	4.00	-	4.09	-	4.07	3.98	3.95	3.24	3.21
31.....	4.11	-	3.99	4.00	-	4.11	-	4.05	-	3.94	3.50	-

Add 850.00 to obtain elevation in feet, Geodetic Survey of Canada datum, 1928 adjustment.

Location: Lat. 51° 26' 15", long. 99° 56' 50", Manitoba, fourteen miles northeast of Sifton on north end of Lake Dauphin. Gauge: Staff; elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. Period of Record: January 1949 to date. Extremes Recorded: Daily - Maximum, 10 July 1953, 858.02 feet, Minimum, 29 September 1958, 852.19 feet. Remarks: Records supplied by Manitoba Water Resources Branch.

Daily Elevations in Feet for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	4.25	4.00	-	-	-	-	4.09	4.50	4.23	3.83	3.55	3.60
2.....	4.54	3.90	-	-	-	-	4.13	4.30	4.84	3.64	3.39	2.70
3.....	4.55	3.88	-	-	-	-	4.15	4.47	4.24	3.82	-	3.31
4.....	4.64	3.90	-	-	3.99	4.00	4.18	4.59	3.83	3.98	3.72	3.36
5.....	4.32	3.89	-	-	-	-	4.21	4.43	4.23	4.12	2.67	3.35
6.....	4.12	3.90	3.92	-	-	-	4.23	4.40	4.10	3.77	3.63	3.22
7.....	-	3.68	-	3.95	-	-	4.25	4.42	2.97	3.97	3.80	3.36
8.....	-	3.77	-	-	-	-	4.28	4.32	4.18	3.89	3.43	3.33
9.....	4.22	3.99	3.89	-	-	-	4.29	4.41	4.08	3.97	3.72	3.05
10.....	4.22	4.02	-	-	-	-	4.31	4.40	3.84	3.80	3.45	4.14
11.....	4.23	3.99	4.00	-	4.00	4.00	4.30	4.30	3.89	3.75	3.88	3.14
12.....	4.23	3.99	-	-	-	-	4.33	5.10	3.96	4.08	3.21	3.42
13.....	4.25	3.99	-	-	-	-	4.37	4.18	4.04	3.87	3.43	3.44
14.....	4.10	3.99	-	3.95	-	-	4.38	4.21	3.88	2.84	3.31	-
15.....	4.16	3.99	-	-	-	-	4.36	4.41	4.00	3.92	3.35	2.58
16.....	4.17	3.95	-	-	-	-	4.37	-	4.00	3.76	3.36	3.28
17.....	4.16	3.99	4.00	-	-	-	4.07	3.93	4.00	3.44	-	3.72
18.....	4.20	3.95	-	-	4.00	4.00	4.97	2.73	3.97	3.67	3.31	3.41
19.....	4.24	3.92	-	-	-	-	3.97	2.93	3.84	3.83	3.33	-
20.....	4.22	3.95	-	-	-	-	4.28	4.22	3.87	3.76	3.21	2.61
21.....	4.57	-	-	3.95	-	-	4.32	3.53	3.91	3.62	3.15	3.28
22.....	4.92	-	-	-	-	-	4.30	4.03	3.87	3.79	3.43	3.08
23.....	4.97	-	-	-	-	-	4.00	4.21	3.31	3.79	3.18	3.28
24.....	4.04	3.97	3.98	-	-	-	4.18	4.10	2.97	3.68	3.32	3.73
25.....	4.13	3.99	-	-	4.00	4.00	4.38	4.32	3.32	3.62	2.85	3.42
26.....	4.11	3.99	-	-	-	4.01	4.36	2.83	3.90	-	3.31	3.18
27.....	4.12	-	-	-	-	4.02	4.19	4.11	3.86	3.11	2.96	3.22
28.....	4.22	3.99	-	3.99	-	4.03	4.68	4.11	4.01	3.10	3.41	3.21
29.....	4.02	-	-	-	-	4.04	4.44	4.12	3.84	3.05	3.02	2.19
30.....	4.25	-	-	-	-	4.06	3.76	4.12	3.63	3.70	3.06	3.22
31.....	3.47	-	3.95	-	-	4.07	-	3.94	-	3.51	-	-

Add 850.00 to obtain elevation in feet, Geodetic Survey of Canada datum, 1928 adjustment.

Location: Lat. 51° 27' 00", long. 99° 58' 00", in SE. 1/4 sec. 6, tp. 29, rge. 18, W. 1st Mer., Manitoba, below Control Dam. Drainage Area: 3,450 square miles. Gauge: Recording; elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. Measurement of Discharge: From cableway. Period of Record: October 1956 to date. Extremes Recorded: Daily - Maximum, 19 May 1957, 1,190 cfs (elevation 855.15 ft.), Minimum, 15, 24 and 30 September 1958, 22 cfs (elevation 850.66 ft.); Instantaneous Maximum 12:10 p.m., 19 May 1957, 1,310 cfs (elevation 855.47 ft.). Remarks: Records good during open-water period; fair during ice period.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	126	64	101	93	62	67	81	227	73	68	58	46
2.....	172	64	100	93	60	70	76	187	116	68	55	36
3.....	212	68	98	94	60	72	76	187	70	65	58	40
4.....	240	66	97	96	59	76	74	106	62	66	66	42
5.....	122	69	93	97	60	78	72	82	72	58	44	43
6.....	124	67	89	96	62	81	71	82	70	69	46	42
7.....	105	62	86	97	64	84	71	80	64	71	43	42
8.....	106	63b	84	96	65	86	71	80	69	73	43	43
9.....	117	67b	83	90	67	83	69	113	64	72	38	38
10.....	128	69b	86	85	71	81	69	83	58	71	36	48
11.....	176	72	90	80	73	80	71	83	63	70	39	39
12.....	166	70	92	76	74	79	72	164	66	75	36	42
13.....	170	70	93	76	72	79	110	101	66	81	38	45
14.....	162	72	92	77	72	80	251	92	68	60	34	39
15.....	115	70	90	77	73	78	254	88	68	69	39	22
16.....	96	69	89	74	77	85	254	90	68	72	37	36
17.....	103	70b	80	69	78	128	245	81	68	66	39	39
18.....	106	73	67	72	78	84	290	61	66	58	39	36
19.....	92	74	66	68	79	78	218	73	59	60	35	34
20.....	80	77	66	68	78	78	245	82	63	59	36	29
21.....	81	80	67	65	78	78	226	77	66	58	36	26
22.....	81	81	77	66	77	79	242	85	66	57	36	31
23.....	64	84	83	67	71	79	223	81	62	54	39	29
24.....	66	88	78	67	63	79	228	74	58	50	39	22
25.....	70	90	76	65	57	79	254	76	60	51	36	28
26.....	72	109	74	68	60	79b	263	58	66	52	42	28
27.....	70	106	76	71	62	79	231	71	69	55	37	28
28.....	69	98	80	71	65	79	90	71	66	53	42	28
29.....	70	100	83	70	-	78	208	71	66	50	40	24
30.....	75	100	86	67	-	79	162	70	70	57	41	22
31.....	68	-	92	64	-	83	-	68	-	59	46	-
Mean	113	77	84	78	68	81	162	95	67	63	41.7	34.9
Per sq. mi.	0.033	0.022	0.024	0.023	0.020	0.023	0.047	0.028	0.019	0.018	0.012	0.010
Acre-feet	6,950	4,590	5,180	4,790	3,800	4,950	9,650	5,840	4,010	3,860	2,560	2,080

The Year.....Discharge: Daily - Maximum 18 April, 290 (elevation 852.30)
 - Minimum 15, 24 and 30 September, 22 (elevation 850.67)
 Instantaneous Maximum 12:40 p.m., 18 April, 348 (elevation 852.67)
 Mean 80; Per Square Mile 0.023
 Runoff: Acre-feet 58,260; Depth in inches on drainage area 0.317

b - Ice conditions 17 November to 26 March and as indicated.

Location: Lat. 51° 27' 30", long. 100° 01' 00", in SW. 1/4 sec. 1, tp. 29, rge. 19, W. 1st Mer., Manitoba, at bridge four miles south of Fork River on Highway No. 20. Drainage Area: 114 square miles. Gauge: Wire-weight. Measurement of Discharge: From bridge or by wading. Period of Record: Mainly open water April 1948 to date. Extremes Recorded: Daily - Maximum, 24 April 1948, 1,050 cfs, Minimum, Nil at various times. Remarks: Records fair.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	Nil b	15b	0.2	0.1	Nil	Nil	Nil	Nil	-	-
2.....	-	-	"	14	0.3	0.1	"	"	"	"	-	-
3.....	-	-	"	14	0.3	0.1	"	"	"	"	-	-
4.....	-	-	"	6.6	0.3	0.1	"	"	"	"	-	-
5.....	-	-	"	10	0.3	0.1	"	"	"	"	-	-
6.....	-	-	"	4.8	0.3	0.1	"	"	"	"	-	-
7.....	-	-	"	1.8	0.4	0.1	"	"	"	"	-	-
8.....	-	-	"	1.6	0.4	0	"	"	"	"	-	-
9.....	-	-	"	1.0	0.3	0	"	"	"	"	-	-
10.....	-	-	"	0.8	0.3	Nil	"	"	"	"	-	-
11.....	-	-	"	0.8	0.3	"	"	"	"	"	-	-
12.....	-	-	"	0.6	0.3	"	"	"	"	"	-	-
13.....	-	-	"	0.6	0.1	"	"	"	"	"	-	-
14.....	-	-	"	0.5	0.2	"	"	"	"	"	-	-
15.....	-	-	"	0.4	0.2	"	"	"	"	"	-	-
16.....	-	-	"	0.3	0.3	"	"	"	"	"	-	-
17.....	-	-	"	0.3	0.2	"	"	"	"	"	-	-
18.....	-	-	"	0.3	0.4	"	"	"	"	"	-	-
19.....	-	-	"	0.3	0.1	"	"	"	"	"	-	-
20.....	-	-	"	0.2	0.1	"	"	"	"	"	-	-
21.....	-	-	"	0.2	0.1	"	"	"	"	"	-	-
22.....	-	-	"	0.2	0.1	"	"	"	"	"	-	-
23.....	-	-	"	0.1	0.1	"	"	"	"	"	-	-
24.....	-	-	"	0.1	0.1	"	"	"	"	"	-	-
25.....	-	-	"	0.1	0.1	"	"	"	"	"	-	-
26.....	-	-	"	0.1	0.1	"	"	"	"	"	-	-
27.....	-	-	"	0.1	0.1	"	"	"	"	"	-	-
28.....	-	-	"	0.2	0.1	"	"	"	"	"	-	-
29.....	-	-	Nil	0.3	0.1	"	"	"	"	"	-	-
30.....	-	-	9	0.2	0.1	Nil	"	"	Nil	"	-	-
31.....	-	-	21	-	0.1	-	Nil	Nil	-	Nil	-	-
Mean	-	-	1.0	2.5	0.2	0.0	Nil	Nil	Nil	Nil	-	-
Per sq. mi.	-	-	0.009	0.022	0.002	0.000	Nil	Nil	Nil	Nil	-	-
Acre-feet	-	-	60	150	13	1	Nil	Nil	Nil	Nil	-	-

The Period.....Discharge: Daily - Maximum 31 March, 21
 (245 days) - Minimum at various times, Nil
 Mean 0.5; Per Square Mile 0.004
 Runoff: Acre-feet 224; Depth in inches on drainage area 0.037

b - Ice conditions 1 March to 1 April.

Location: Lat. 51° 31' 20", long. 100° 23' 30", in SE. 1/4 sec. 31, tp. 29, rge. 21, W. 1st Mer., Manitoba, at Canadian National Railways bridge. Drainage Area: 105 square miles. Gauge: Staff. Measurement of Discharge: From bridge or by wading. Period of Record: Mainly open water April 1954 to date. Extremes Recorded: Daily - Maximum, 4 May 1955, 582 cfs, Minimum, Nil at various times. Remarks: Records good.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	Nil	35	4	6	0	0	27	4	-	-
2.....	-	-	"	33	6	5	0	0	22	4	-	-
3.....	-	-	"	28	7	5	0	0	21	4	-	-
4.....	-	-	"	24	7	4	0	0	21	4	-	-
5.....	-	-	"	19	7	3	0	0	20	4	-	-
6.....	-	-	"	16	7	3	14	0	22	4	-	-
7.....	-	-	"	13	5e	2	20	0	20	4	-	-
8.....	-	-	"	11	5e	2	14	0	17	5	-	-
9.....	-	-	"	10	5e	1	12	0	14	5	-	-
10.....	-	-	"	10	5e	1	11	0	11	5	-	-
11.....	-	-	"	10	4e	1	11	0	8	4	-	-
12.....	-	-	"	13	4e	1	10	0	5	3	-	-
13.....	-	-	"	12	4e	1	9	0	4	3	-	-
14.....	-	-	"	11	3	0	10	0	7	3	-	-
15.....	-	-	"	10	3	0	13	0	6	3	-	-
16.....	-	-	"	9	3	0	18	0	5	3	-	-
17.....	-	-	"	9	2	0	4	0	5	2	-	-
18.....	-	-	"	8	2	0	3	0	5	2	-	-
19.....	-	-	"	10	2	0	2	0	4	2	-	-
20.....	-	-	"	11	2	0	2	0	4	2	-	-
21.....	-	-	"	9	1	0	1	0	3	2	-	-
22.....	-	-	"	8	1	0	1	0	2	3	-	-
23.....	-	-	"	8	1	0	1	0	2	3	-	-
24.....	-	-	"	7	1	0	0	0	2	3	-	-
25.....	-	-	"	6	1	0	0	0	6	3	-	-
26.....	-	-	"	5	2	0	0	0	6	2	-	-
27.....	-	-	"	4	2	0	0	0	6	2	-	-
28.....	-	-	Nil	4	1	0	0	0	1	2	-	-
29.....	-	-	4	6	1	0	0	34	2	2	-	-
30.....	-	-	24	8	2	0	0	38	4	2	-	-
31.....	-	-	40	-	3	-	0	32	-	2	-	-
Mean	-	-	2.2	12.2	3.3	1.1	5.0	3.4	9.4	3.1	-	-
Per sq. mi.	-	-	0.021	0.116	0.031	0.010	0.048	0.032	0.090	0.030	-	-
Acre-feet	-	-	135	728	204	69	309	206	559	190	-	-

The Period.....Discharge: Daily - Maximum 31 March, 40 (elevation 1,112.44)
(245 days) - Minimum in March, Nil

Mean 4.9; Per Square Mile 0.047

Runoff: Acre-feet 2,400; Depth in inches on drainage area 0.427

e - Estimated.

Location: Lat. 51° 25' 00", long. 100° 21' 10", in NW. 1/4 sec. 21, tp. 28, rge. 21, W. 1st Mer., Manitoba, seven and one-half miles south of Ethelbert at bridge on Highway No. 10. Drainage Area: 82 square miles. Gauge: Recording. Measurement of Discharge: From bridge or by wading. Period of Record: Mainly open water April 1954 to date. Extremes Recorded: Daily - Maximum, 5 April 1955, 630 cfs, Minimum, Nil at various times. Remarks: Records good during open-water period; fair during ice period.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	Nil b	27	18	7	2	1	12	4	-	-
2.....	-	-	"	30	12	7	2	1	10	2	-	-
3.....	-	-	"	27	11	7	2	0	9	3	-	-
4.....	-	-	"	22	9	7	2	0	7	3	-	-
5.....	-	-	"	20	7	6	3	0	5	2	-	-
6.....	-	-	"	17	7	5	5	0	5	2	-	-
7.....	-	-	"	14	6	4	6	0	4	2	-	-
8.....	-	-	"	12	6	4	8	0	3	2	-	-
9.....	-	-	"	10	6	4	8	0	2	3	-	-
10.....	-	-	"	10	6	3	7	0	2	3	-	-
11.....	-	-	"	10	6	3	6	0	2	3	-	-
12.....	-	-	"	22	6	2	4	0	2	2	-	-
13.....	-	-	"	32b	5	2	4	0	2	2	-	-
14.....	-	-	"	39	6	2	4	0	2	2	-	-
15.....	-	-	"	37	5	2	4	0	2	2	-	-
16.....	-	-	"	29	5	2	3	0	2	2	-	-
17.....	-	-	"	28	4	2	2	0	3	2	-	-
18.....	-	-	"	31	4	3	2	0	2	2	-	-
19.....	-	-	"	22	4	4	2	0	2	2	-	-
20.....	-	-	"	20	4	4	2	0	2	2	-	-
21.....	-	-	"	22	4	3	1	1	2	2	-	-
22.....	-	-	"	19	4	2	1	0	2	2	-	-
23.....	-	-	"	19	4	2	1	1	2	3	-	-
24.....	-	-	"	15	4	2	1	2	2	3	-	-
25.....	-	-	"	3	4	2	1	2	2	3	-	-
26.....	-	-	7	11	4	2	1	2	2	3	-	-
27.....	-	-	9	10	4	2	1	3	2	3	-	-
28.....	-	-	11	21	4	2	1	5	2	3	-	-
29.....	-	-	14	15	4	2	1	9	2	3	-	-
30.....	-	-	19	15	4	2	1	8	2	4	-	-
31.....	-	-	23	-	6	-	1	7	-	3	-	-
Mean	-	-	2.8	20.7	5.9	3.4	2.9	1.4	3.3	2.5	-	-
Per sq. mi.	-	-	0.034	0.252	0.072	0.041	0.035	0.017	0.040	0.030	-	-
Acre-feet	-	-	173	1,230	363	200	177	83	198	157	-	-

The Period.....Discharge: Daily - Maximum 14 April, 39
 (245 days) - Minimum in March, Nil
 Instantaneous Maximum 5:30 p.m., 14 April, 39
 Mean 5.3; Per Square Mile 0.065
 Runoff: Acre-feet 2,580; Depth in inches on drainage area 0.589

b - Ice conditions 1 March to 13 April.

Location: Lat. 51° 13' 51", long. 100° 57' 43", Manitoba, Indian Reserve 63A. Drainage Area: 295 square miles.
Gauge: Wire-weight. Measurement of Discharge: From bridge or by wading. Period of Record: March to October, 1957 to date. Extremes Recorded: Daily - Maximum, 30 April 1957, 241 cfs, Minimum, 4 to 12 and 26 August 1958, 0 cfs. Remarks: Records good during open-water period; fair during ice period.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	10b	21	10e	8e	2	$\frac{1}{1}$	$\frac{1}{1}$	$\frac{1}{1}$	-	-
2.....	-	-	10	20	10e	6e	2	$\frac{1}{1}$	$\frac{1}{1}$	$\frac{1}{1}$	-	-
3.....	-	-	10	23	10	5e	2	1	1	1	-	-
4.....	-	-	11	31	7	5e	2	$\frac{0}{0}$	1	1	-	-
5.....	-	-	11	37	8	5e	6	$\frac{0}{0}$	1	2	-	-
6.....	-	-	11	39	8	5e	6	0	1	2	-	-
7.....	-	-	11	41	10	5e	$\frac{8}{8}$	0	1	2	-	-
8.....	-	-	12	42	7	5	7	0	1	2	-	-
9.....	-	-	12	40	4	5	6	0	1	2	-	-
10.....	-	-	12	38	7	5	4	0	1	2	-	-
11.....	-	-	13	38	7	5	5	0	1	2	-	-
12.....	-	-	13	35	7	5	2	0	1	2	-	-
13.....	-	-	13	34	6	5	2	1	1	2	-	-
14.....	-	-	13	36	6	5	3	1	1	2	-	-
15.....	-	-	14	35	6	5e	2	1	1	2	-	-
16.....	-	-	14	33b	7	5e	2	1	1	2	-	-
17.....	-	-	14	16	7	5e	$\frac{1}{2}$	1	1	2	-	-
18.....	-	-	14	25	7	5e	$\frac{2}{2}$	1	1	$\frac{3}{2}$	-	-
19.....	-	-	14	21	8	5e	1	1	1	$\frac{2}{2}$	-	-
20.....	-	-	14	6	6	5e	1	1	1	3	-	-
21.....	-	-	14	$\frac{3}{4}$	7	4e	1	1	1	3	-	-
22.....	-	-	15	4	6	4	1	1	1	2	-	-
23.....	-	-	15	7	5	4	1	1	1	3	-	-
24.....	-	-	15	10	7	4	1	1	1	2	-	-
25.....	-	-	12	10	8	4	1	1	1	1	-	-
26.....	-	-	14	7	$\frac{11}{10}$	4	1	0	1	1	-	-
27.....	-	-	14	7e	$\frac{10}{10}$	4	1	1	1	1	-	-
28.....	-	-	14	8e	8	4	1e	1	1	1	-	-
29.....	-	-	13	9e	7	1	1	1	1	1	-	-
30.....	-	-	22	9e	8	$\frac{1}{2}$	1	1	1	1	-	-
31.....	-	-	22	-	10	-	1	1	-	1	-	-
Mean	-	-	13.4	22.8	7.6	4.6e	2.5	0.7	1.0	1.8	-	-
Per sq. mi.	-	-	0.045	0.077	0.026	0.016	0.008	0.002	0.003	0.006	-	-
Acre-feet	-	-	825	1,360	466	276	153	42	60	109	-	-

The Period.....Discharge: Daily - Maximum 8 April, 42
(245 days) - Minimum at various times in August, 0
Mean 6.8; Per Square Mile 0.023
Runoff: Acre-feet 3,290; Depth in inches on drainage area 0.207

b - Ice conditions 1 March to 16 April. e - Estimated.

Location: Lat. 51° 10' 30", long. 100° 42' 30", in NW. 1/4 sec. 24, tp. 25, rge. 24, W. 1st Mer., Manitoba, one-quarter mile west of Grandview, at bridge on Highway No. 5. Drainage Area: 706 square miles. Gauge: Wire-weight. Measurement of Discharge: From bridge or by wading. Period of Record: Open water 1956 and March to October 1958. Extremes Recorded: Daily - Maximum, 5 May 1956, 1,630 cfs, Minimum, August and September 1958, 0 cfs. Remarks: Records fair. Data for open water in 1955, were obtained seven miles west of Grandview, Station No. 5LJ₁₈.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	11b	98	29	26	4	1	6	1	-	-
2.....	-	-	11	148	39	32	4	0	7	1	-	-
3.....	-	-	11	160	39	39	4	0	5	1	-	-
4.....	-	-	11	221b	39	32	5	0	3	1	-	-
5.....	-	-	11	183	32	29	5	0	2	1	-	-
6.....	-	-	11	176	32	26	5	0	1	1	-	-
7.....	-	-	11	125	32	20	6	0	0	1	-	-
8.....	-	-	11	155	26	20	6	3	0	1	-	-
9.....	-	-	11	146	23	23	6	2	0	1	-	-
10.....	-	-	11	116	32	18	6	1	0	1	-	-
11.....	-	-	11	116	32	20	6	0	0	1	-	-
12.....	-	-	11	101	32	19	6	0	0	1	-	-
13.....	-	-	11	98	32	10	7	0	4	1	-	-
14.....	-	-	11	98	32	10	7	0	8	1	-	-
15.....	-	-	11	87	32	10	7	0	9	1	-	-
16.....	-	-	12	92	32	9	7	0	7	1	-	-
17.....	-	-	12	81	32	9	7	0	5	1	-	-
18.....	-	-	13	71	36	9	7	0	2	1	-	-
19.....	-	-	13	68	43	8	7	0	1	1	-	-
20.....	-	-	14	58	26	8	8	0	1	1	-	-
21.....	-	-	14	56	20	8	7	0	1	1	-	-
22.....	-	-	15	47	20	8	7	0	1	1	-	-
23.....	-	-	16	43	23	7	7	0	1	1	-	-
24.....	-	-	20	39	20	7	7	0	1	1	-	-
25.....	-	-	32	39	20	7	7	0	1	1	-	-
26.....	-	-	39	32	20	6	7	0	1	1	-	-
27.....	-	-	47	32	20	6	7	0	1	1	-	-
28.....	-	-	56	32	20	6	7	0	1	1	-	-
29.....	-	-	66	29	20	5	5	0	1	1	-	-
30.....	-	-	76	26	15	5	3	3	1	1	-	-
31.....	-	-	87	-	10	-	2	5	-	1	-	-
Mean	-	-	22.5	92	27.7	14.7	6.0	0.5	2.4	1.0	-	-
Per sq. mi.	-	-	0.032	0.130	0.039	0.021	0.008	0.001	0.003	0.001	-	-
Acre-feet	-	-	1,380	5,500	1,710	877	370	30	141	61	-	-

The Period.....Discharge: Daily - Maximum 4 April, 221
 (245 days) - Minimum at various times, 0
 Mean 20.7; Per Square Mile 0.029
 Runoff: Acre-feet 10,070; Depth in inches on drainage area 0.264

b - Ice conditions 1 March to 4 April.

Location: Lat. 51° 16' 45", long. 100° 00' 39", in NW. 1/4 sec. 25, tp. 26, rge. 19, W. 1st Mer., Manitoba, nine miles north and one and one-half miles east of Dauphin, at bridge on Highway No. 20. Drainage Area: 1,150 square miles. Gauge: Tape-weight. Measurement of Discharge: From bridge or by wading. Period of Record: Mainly open water 1948 to date. Extremes Recorded: Daily - Maximum, 26 April 1948, 7,950 cfs, Minimum, Nil at various times. Remarks: Records good during open-water period; fair during ice period. Continuous records 1913 to 1919 and open-water records 1920 to 1922 and 1924 to 1928 were obtained at Valley River, Station No. 5LJ₄.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	12b	337	53	31	9	4	2	0	-	-
2.....	-	-	12	562	49	30	9	4	1	1	-	-
3.....	-	-	12	628	48	30	8	3	1	0e	-	-
4.....	-	-	12	849	52	39	10	3	2	0	-	-
5.....	-	-	12	828	53	42	11	3	1	1	-	-
6.....	-	-	12	395	52	42	12	2	1	0	-	-
7.....	-	-	12	355	52	39	11	2	1	0	-	-
8.....	-	-	12	302b	50	35	22e	2	1	0	-	-
9.....	-	-	12	260	48	31	32	2	1	0	-	-
10.....	-	-	12	233	45	25	38	1	1e	0	-	-
11.....	-	-	12	204	43	23	39	1	0	1	-	-
12.....	-	-	12	168	43	19	36	1	1	0	-	-
13.....	-	-	12	202	41	19	33	1	2	0e	-	-
14.....	-	-	12	165	41	14	30	1	1	0	-	-
15.....	-	-	12	153	42	14e	25e	Nil	0	0	-	-
16.....	-	-	12	138	37	14	20	"	0	0e	-	-
17.....	-	-	12	125	36	14	15	"	0	0	-	-
18.....	-	-	13	118	33	13	9	"	0e	0	-	-
19.....	-	-	14	104	31	14	8	"	Nil	0	-	-
20.....	-	-	15	108	29	11	11	"	"	0e	-	-
21.....	-	-	25	99	26e	10	8	"	"	1	-	-
22.....	-	-	40	94	24	10	6	"	"	1	-	-
23.....	-	-	60	90	23	10	5	1	"	1	-	-
24.....	-	-	84	83	23	11	5	0	"	1	-	-
25.....	-	-	83	70	23	16	5	0	"	2e	-	-
26.....	-	-	102	65	23	13	5	0e	"	3	-	-
27.....	-	-	122	57	23	11	5	0	0	4	-	-
28.....	-	-	173	54	23	11	5	0	0	5	-	-
29.....	-	-	184	52	21	10	5	3	0	5	-	-
30.....	-	-	202	53	25	9	5	2	0	5	-	-
31.....	-	-	202	-	30	-	4	2	-	6	-	-
Mean	-	-	49.1	232	36.8	20.3	14.4	1.2	0.5	1.2	-	-
Per sq. mi.	-	-	0.043	0.202	0.032	0.018	0.013	0.001	0.000	0.001	-	-
Acre-feet	-	-	3,020	13,790	2,270	1,210	885	75	32	73	-	-

The Period.....Discharge: Daily - Maximum 4 April, 849
 (245 days) - Minimum at various times, Nil
 Mean 43.9; Per Square Mile 0.038
 Runoff: Acre-feet 21,360; Depth in inches on drainage area 0.349

b - Ice conditions 1 March to 8 April.

e - Estimated 10 to 18 September and as indicated.

Location: Lat. 51° 19' 10", long. 100° 22' 00", in SE. 1/4 sec. 20, tp. 27, rge. 21, W. 1st Mer., Manitoba, north of Ashville at bridge on Highway No. 10. Drainage Area: 66 square miles. Gauge: Staff. Measurement of Discharge: From bridge or by wading. Period of Record: Mainly open water April 1954 to date. Extremes Recorded: Daily - Maximum, 16 April 1954, 524 cfs, Minimum, Nil at various times. Remarks: Records fair.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	Nil b	50	3	2	0e	Nil	Nil	Nil	-	-
2.....	-	-	"	54	4	3	0e	"	"	"	-	-
3.....	-	-	"	41	4	4	0e	"	"	"	-	-
4.....	-	-	"	32	3	4	0	"	"	"	-	-
5.....	-	-	"	23	3	3	0	"	"	"	-	-
6.....	-	-	"	18	3	3	0	"	"	"	-	-
7.....	-	-	"	14	3	2	2	"	"	"	-	-
8.....	-	-	"	12	3	2	2	"	"	"	-	-
9.....	-	-	"	10	3	1	0	"	"	"	-	-
10.....	-	-	"	10	3	1	1	"	"	"	-	-
11.....	-	-	"	10	3	1	0	"	"	"	-	-
12.....	-	-	"	8	4	1	0	"	"	"	-	-
13.....	-	-	"	7	2	1	0	"	"	"	-	-
14.....	-	-	"	6	2	1	0	"	"	"	-	-
15.....	-	-	"	6	2	1	0	"	"	"	-	-
16.....	-	-	"	6	2	1	0	"	"	"	-	-
17.....	-	-	"	5	2	1	Nil	"	"	"	-	-
18.....	-	-	"	5	2	1	"	"	"	"	-	-
19.....	-	-	"	5	1	2	"	"	"	"	-	-
20.....	-	-	Nil	4	1	1	"	"	"	"	-	-
21.....	-	-	0	4	1	0	"	"	"	"	-	-
22.....	-	-	0	4	1	0	"	"	"	"	-	-
23.....	-	-	0	4	1	0	"	"	"	"	-	-
24.....	-	-	0	4	1	0	"	"	"	"	-	-
25.....	-	-	0	3	1	0	"	"	"	"	-	-
26.....	-	-	4	3	1	0	"	"	"	"	-	-
27.....	-	-	14	3	1	0	"	"	"	"	-	-
28.....	-	-	17	3	1	0	"	"	"	Nil	-	-
29.....	-	-	19	3	1	0e	"	"	"	0	-	-
30.....	-	-	23b	3	1	0e	"	"	Nil	0	-	-
31.....	-	-	37	-	3	-	Nil	Nil	-	0	-	-
Mean	-	-	3.7	12.0	2.1	1.2	0.2	Nil	Nil	0.0	-	-
Per sq. mi.	-	-	0.056	0.180	0.032	0.018	0.003	Nil	Nil	0	-	-
Acre-feet	-	-	226	714	131	71	10	Nil	Nil	0.0	-	-

The Period.....Discharge: Daily - Maximum 2 April 54
 (245 days) - Minimum at various times, Nil

Mean 2.4; Per Square Mile 0.035

Runoff: Acre-feet 1,150; Depth in inches on drainage area 0.326

b - Ice conditions 1 to 30 March.

e - Estimated.

Location: Lat. 51° 12' 30", long. 100° 00' 45", in NW. 1/4 sec. 36, tp. 25, rge. 19, W. 1st Mer., Manitoba, one and one-half miles east and four miles north of Dauphin at bridge on Highway No. 20. Drainage Area: 357 square miles. Gauge: Wire-weight. Measurement of Discharge: From bridge or by wading. Period of Record: Mainly open water, 1948 to date. Extremes Recorded: Daily - Maximum, 26 April 1957, 3,480 cfs, Minimum, Nil at various times. Remarks: Records good during open-water periods; fair during ice period.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	Nil b	266	6e	5	0	Nil	Nil	Nil	-	-
2.....	-	-	"	263	6	5	0	"	"	"	-	-
3.....	-	-	"	225	6	4	0	"	"	"	-	-
4.....	-	-	"	243	7	4	1e	"	"	"	-	-
5.....	-	-	"	200b	7	4e	2	"	"	"	-	-
6.....	-	-	"	154	8	4	2	"	"	"	-	-
7.....	-	-	"	116	7	3	2	"	"	"	-	-
8.....	-	-	"	85	8	3e	1	"	"	"	-	-
9.....	-	-	"	75e	8	3	1	"	"	"	-	-
10.....	-	-	"	66	8	3	0	"	"	"	-	-
11.....	-	-	"	56e	8e	2	0	"	"	"	-	-
12.....	-	-	"	46	8	2	6	"	"	"	-	-
13.....	-	-	"	29	7e	2e	4	"	"	"	-	-
14.....	-	-	"	27	7	2	4	"	"	"	-	-
15.....	-	-	"	24	6	2	4	"	"	"	-	-
16.....	-	-	"	22	6e	1	3	"	"	"	-	-
17.....	-	-	"	20	6	1	3e	"	"	"	-	-
18.....	-	-	"	18e	5e	1	2	"	"	"	-	-
19.....	-	-	"	15	5	2	2	"	"	"	-	-
20.....	-	-	"	13e	5	1	1e	"	"	"	-	-
21.....	-	-	"	11	5e	1	1	"	"	"	-	-
22.....	-	-	"	10	5	0	1	"	"	"	-	-
23.....	-	-	"	9e	4	1	0	"	"	"	-	-
24.....	-	-	"	7	4	1e	0	"	"	"	-	-
25.....	-	-	"	6	4	1	0	"	"	"	-	-
26.....	-	-	Nil	6	4	1	0	"	"	"	-	-
27.....	-	-	5	6e	4	0	0	"	"	"	-	-
28.....	-	-	22	7	4	0	0	"	"	"	-	-
29.....	-	-	77	6	4	0	0e	"	"	"	-	-
30.....	-	-	25	6	5	0	0	"	Nil	"	-	-
31.....	-	-	200	-	5	-	0	Nil	-	Nil	-	-
Mean	-	-	10.6	68.0	5.9	2.0	1.3	Nil	Nil	Nil	-	-
Per sq. mi.	-	-	0.030	0.190	0.017	0.006	0.004	Nil	Nil	Nil	-	-
Acre-feet			653	4,040	361	117	79	Nil	Nil	Nil	-	-

The Period.....Discharge: Daily - Maximum 1 April, 266
(245)days - Minimum at various times, Nil

Mean 10.8; Per Square Mile 0.030

Runoff: Acre-feet 5,250; Depth in inches on drainage area 0.279

b - Ice conditions 1 March to 5 April.

e - Estimated.

Location: Lat. 51° 11' 00", long. 100° 00' 45", in SW. 1/4 sec. 25, tp. 25, rge. 19, W. 1st Mer., Manitoba, at bridge on Highway No. 20. Drainage Area: 261 square miles. Gauge: Wire-weight; elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. Measurement of Discharge: From bridge and by wading. Period of Record: Mainly open water 1948 to date. Extremes Recorded: Daily - Maximum, 19 June 1956, 5,240 cfs (elevation 919.58 ft.), Minimum, Nil at various times. Remarks: Records good during open-water period; fair during ice period.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	0b	258	18	11	3	2	2	2	-	-
2.....	-	-	0	194	16	11	4	2	2	2	-	-
3.....	-	-	0	208	16	10	4	2	2	2	-	-
4.....	-	-	0	222b	18	9	8	2	2	2	-	-
5.....	-	-	0	202	23	8	14	2	2	2	-	-
6.....	-	-	0	165	26	7	24	2	2	2	-	-
7.....	-	-	0	154	26	6	40	2	1	2	-	-
8.....	-	-	0	151	25	5	47	2	1	1	-	-
9.....	-	-	0	113	24	6	44	2	1	1	-	-
10.....	-	-	0	81	22	6	40	2	1	1	-	-
11.....	-	-	0	72	22	6	34	2	1	1	-	-
12.....	-	-	0	61	20	7	23	2	1	1	-	-
13.....	-	-	0	51	20	7	18	2	1	1	-	-
14.....	-	-	0	49	18	7	14	2	1	1	-	-
15.....	-	-	0	46	17	6	12	2	1	1	-	-
16.....	-	-	0	44	16	5	12	2	1	1	-	-
17.....	-	-	0	38	15	4	10	2	1	1	-	-
18.....	-	-	0	34	13	4	9	2	1	1	-	-
19.....	-	-	0	30	12	4	8	2	1	1	-	-
20.....	-	-	0	27	10	4	7	2	1	1	-	-
21.....	-	-	0	26	10	3	7	2	1	1	-	-
22.....	-	-	0	25	9	2	6	2	1	1	-	-
23.....	-	-	0	23	9	2	5	2	1	1	-	-
24.....	-	-	0	21	9	3	4	2	1	1	-	-
25.....	-	-	0	19	8	3	4	2	1	3	-	-
26.....	-	-	0	17	8	3	4	1	1	4	-	-
27.....	-	-	42	16	8	3	4	1	1	3	-	-
28.....	-	-	52	16	7	3	4	1	1	2	-	-
29.....	-	-	268	16	7	3	3	2	2	2	-	-
30.....	-	-	240	16	9	3	3	2	2	2	-	-
31.....	-	-	267	-	10	-	2	2	-	2	-	-
Mean	-	-	28.0	80	15.2	5.4	13.6	1.9	1.3	1.6	-	-
Per sq. mi.	-	-	0.107	0.307	0.058	0.021	0.052	0.007	0.005	0.006	-	-
Acre-feet	-	-	1,720	4,750	934	319	835	117	75	97	-	-

The Period.....Discharge: Daily - Maximum 29 March, 268
(245 days) - Minimum in March, 0

Mean 18.2; Per Square Mile 0.070

Runoff: Acre-feet 8,850; Depth in inches on drainage area 0.637

b - Ice conditions 1 March to 4 April.

EDWARDS CREEK NEAR DAUPHIN - STATION No. 5LJ₂₂

Location: Lat. 51° 07' 30", long. 100° 02' 20", on western boundary of NW. 1/4 sec. 35, tp. 24, rge. 19, W. 1st Mer., Manitoba, at bridge one and one-half miles south of Dauphin. Drainage Area: 69 square miles. Gauge: Recording. Measurement of Discharge: From bridge or by wading. Period of Record: March to October, 1957 to date. Extremes Recorded: Daily - Maximum, 24 April 1957, 883 cfs, Minimum, March 1958, Nil. Remarks: Records good during open-water period; fair during ice period.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	Nil b	104	12	5	3	0	3	6	-	-
2.....	-	-	"	101	18	5	4	0	2	4	-	-
3.....	-	-	"	97	29	4	4	0	2	4	-	-
4.....	-	-	"	90	31	3	6	0	0	3	-	-
5.....	-	-	"	88	23	3	18	0	1	3	-	-
6.....	-	-	"	85	20	2	83	0	0	3	-	-
7.....	-	-	"	96	18	2	78	0	0	3	-	-
8.....	-	-	"	88	18	2	34	0	0	3	-	-
9.....	-	-	Nil	76	16	3	18	0	0	3	-	-
10.....	-	-	1	56	15	6	11	0	0	2	-	-
11.....	-	-	0	45	12	4	7	0	0	2	-	-
12.....	-	-	0	35	12	3	7	0	0	3	-	-
13.....	-	-	1	42	9	3	7	0	0	2	-	-
14.....	-	-	1	40	7	2	5	0	0	2	-	-
15.....	-	-	2	32	6	2	13	0	0	2	-	-
16.....	-	-	2	28b	5	2	10	0	1	2	-	-
17.....	-	-	2	35	4	3	8	0	2	2	-	-
18.....	-	-	3	29	5	2	5	0	2	2	-	-
19.....	-	-	3	29	3	4	4	0	2	1	-	-
20.....	-	-	3	24	3	3	3	0	1	1	-	-
21.....	-	-	3	21	3	2	1	0	1	3	-	-
22.....	-	-	5	18	3	2	1	0	0	13	-	-
23.....	-	-	10	16	3	2	1	0	0	28	-	-
24.....	-	-	15	15	3	3	1	0	0	16	-	-
25.....	-	-	20	14	4	4	1	0	0	9	-	-
26.....	-	-	30	12	4	5	2	0	0	8	-	-
27.....	-	-	40	11	3	3	3	0	0	8	-	-
28.....	-	-	50	15	3	3	2	1	0	7	-	-
29.....	-	-	60	28	3	2	2	7	3	6	-	-
30.....	-	-	68	23	5	2	1	5	8	5	-	-
31.....	-	-	78	-	6	-	0	4	-	5	-	-
Mean	-	-	12.8	46.4	9.9	3.0	11.1	0.5	0.9	5.2	-	-
Per sq. mi.	-	-	0.186	0.672	0.143	0.043	0.161	0.007	0.013	0.075	-	-
Acre-feet	-	-	787	2,760	607	180	680	34	56	319	-	-

The Period.....Discharge: Daily - Maximum 1 April, 104

(245 days)

- Minimum in March, Nil

Instantaneous Maximum 8 a.m., 6 July, 138

Mean 11.2; Per Square Mile 0.162

Runoff: Acre-feet 5,420; Depth in inches on drainage area 1.471

b - Ice conditions 1 March to 16 April.

Location: Lat. 51° 03' 45", long. 99° 47' 00", in NE. 1/4 sec. 9, tp. 24, rge. 17, W. 1st Mer., Manitoba, at Canadian National Railways bridge. Drainage Area: 202 square miles. Gauge: Wire-weight; elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. Measurement of Discharge: From bridge or by wading. Period of Record: Continuous 1913 to 1915; mainly open water 1916 to 1930 and 1948 to date. Extremes Recorded: Daily - Maximum, 4 June 1953, 3,240 cfs (elevation 916.37 ft.), Minimum, Nil at various times. Remarks: Records good during open-water period; fair during ice period.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	1b	243	39	30	18	8	19	44	-	-
2.....	-	-	1	215	68	27	18	4	21	36	-	-
3.....	-	-	1	195	83	26	25	3	19	24	-	-
4.....	-	-	1	195	89	23	24	3	17	24	-	-
5.....	-	-	1	202	83	25	102	3	16	18	-	-
6.....	-	-	1	210	80	25	141	5	16	16	-	-
7.....	-	-	1	205	74	22	202	4	15	12	-	-
8.....	-	-	1	208b	74	19	205	3	14	12	-	-
9.....	-	-	1	186	75	20	97	3	13	11	-	-
10.....	-	-	1	171	71	23	70	2	15	9	-	-
11.....	-	-	1	147	64	25	49	2	15	9	-	-
12.....	-	-	1	123	59	21	37	0	15	9	-	-
13.....	-	-	1	126	59	18	33	1	15	8	-	-
14.....	-	-	1	120	55	19	31	0	18	7	-	-
15.....	-	-	1	116	45	15	40	0	23	6	-	-
16.....	-	-	1	105	41	15	42	0	26	6	-	-
17.....	-	-	1	90	38	14	32	0	29	5	-	-
18.....	-	-	1	82	35	23	28	0	34	5	-	-
19.....	-	-	1	81	31	21	23	0	32	4	-	-
20.....	-	-	1	70	28	20	22	0	33	4	-	-
21.....	-	-	2	62	29	18	19	0	32	4	-	-
22.....	-	-	3	54	29	15	18	0	32	9	-	-
23.....	-	-	4	52	27	13	15	1	32	24	-	-
24.....	-	-	5	48	27	16	12	4	32	15	-	-
25.....	-	-	7	43	28	26	11	11	32	8	-	-
26.....	-	-	16	43	26	26	12	11	31	6	-	-
27.....	-	-	32	42	26	24	18	6	30	5	-	-
28.....	-	-	28	38	24	21	15	7	30	4	-	-
29.....	-	-	30	36	23	18	13	19	31	4	-	-
30.....	-	-	70	51	25	18	11	30	42	4	-	-
31.....	-	-	169	-	31	-	9	21	-	3	-	-
Mean	-	-	12.5	119	47.9	20.9	44.9	4.9	24.3	11.5	-	-
Per sq. mi.	-	-	0.062	0.589	0.237	0.103	0.222	0.024	0.120	0.057	-	-
Acre-feet	-	-	766	7,060	2,950	1,240	2,760	300	1,450	704	-	-

The Period..... Discharge: Daily - Maximum 1 April, 243
 (245 days) - Minimum in August, 0 (elevation 907.87)

Mean 35.4; Per Square Mile 0.175

Runoff: Acre-feet 17,230; Depth in inches on drainage area 1.600

b - Ice conditions 1 March to 8 April.

Location: Lat. 50° 56' 40", long. 99° 31' 15", in NW. 1/4 sec. 32, tp. 22, rge. 15, W. 1st Mer., Manitoba, at traffic bridge four miles north of Laurier. Drainage Area: 418 square miles. Gauge: Recording. Measurement of Discharge: From bridge or by wading. Period of Record: Mainly open water 1948 to date. Extremes Recorded: Daily - Maximum, 5 June 1953, 3,070 cfs, Minimum, Nil at various times. Remarks: Records good during open-water period; fair during ice period.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	<u>1_x</u>	372	44	24	10	7	17	21	-	-
2.....	-	-	1	268	86	22	18	6	14	16	-	-
3.....	-	-	1	263	95	22	22	6	10	16	-	-
4.....	-	-	1	246	87	18 _x	33	6	8	14	-	-
5.....	-	-	1	248	76	16	136	7	8	13	-	-
6.....	-	-	1	248	70	13	287	6	8	12	-	-
7.....	-	-	1	248	63	11	302	5 _x	7	12	-	-
8.....	-	-	1	244	60	10	146	3	7	14	-	-
9.....	-	-	1	162	79	10	96	3	6	14	-	-
10.....	-	-	1	140	61	20	72	3	6	13	-	-
11.....	-	-	1	138	52	20	57	3	6	14	-	-
12.....	-	-	1	111 _b	47	17	46	3	6	14	-	-
13.....	-	-	1	134	44	12	43	2	6	14	-	-
14.....	-	-	1	138	36	10	47	2	6	14	-	-
15.....	-	-	1 _x	120	32	10	62	2	7	14	-	-
16.....	-	-	1	92	27	9	46	2	7	14	-	-
17.....	-	-	1	80	23	10	31	2	8	14	-	-
18.....	-	-	3	67	23	24	24	1	8	14	-	-
19.....	-	-	8	60	22	23	20	Nil	8	14	-	-
20.....	-	-	8	55	21	23	16	"	7	14	-	-
21.....	-	-	9	47	22	14	13	"	6	18	-	-
22.....	-	-	9	42	22	10	12	"	6	46	-	-
23.....	-	-	8	38	22	8 _x	10	4	5	95	-	-
24.....	-	-	10	34	23	13	10	6	5	60	-	-
25.....	-	-	20	30	22	36	9	6	6	39	-	-
26.....	-	-	22	32	22	34	11	5	7	30	-	-
27.....	-	-	72	30	22	20	14	5	7	25	-	-
28.....	-	-	273	30	20	12	12	5	7	22	-	-
29.....	-	-	370	32	20	11	11 _x	22	11	20	-	-
30.....	-	-	420	39	21	10	10	26	25	19	-	-
31.....	-	-	434	-	27	-	8	16	-	16	-	-
Mean	-	-	54	126	41.6	16.4	53	5.3	8.2	21.8	-	-
Per sq. mi.	-	-	0.129	0.301	0.099	0.039	0.127	0.013	0.020	0.052	-	-
Acre-feet	-	-	3,340	7,510	2,560	976	3,240	325	486	1,340	-	-

The Period..... Discharge: Daily - Maximum 31 March, 434
 (245 days) - Minimum 19 to 22 August, Nil
 Instantaneous Maximum 11:30 p.m., 6 July, 462
 Mean 40.7; Per Square Mile 0.097
 Runoff: Acre-feet 19,780; Depth in inches on drainage area 0.886

b - Ice conditions 1 March to 12 April.

x - Manual gauge readings 1 to 15 March, 4 to 23 June, 29 July to 7 August.

Location: Lat. 51° 38' 45", long. 99° 55' 07", in NE. 1/4 sec. 10, tp. 31, rge. 18, W. 1st Mer., Manitoba, at Dominion Government Dock. Gauge: Staff; elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. Period of Record: May 1913 to date. Extremes Recorded: Daily - Maximum, 19 September 1913 (wind), 835.59 feet, Minimum, 14 September 1941, 826.58 feet.

Daily Elevations in Feet for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	10.77	10.88	10.48	10.40	10.40	10.46	10.51	10.74	9.93	10.60	9.88	8.95
2.....	10.76	10.62	10.48	10.40	10.40	10.45	10.52	11.03	10.36	10.54	10.03	9.88
3.....	10.54	10.12	10.48	10.40	10.40	10.45	10.52	10.55	10.35	10.35	9.83	9.80
4.....	10.26	10.42	10.48	10.40	10.40	10.51	10.55	10.36	11.40	10.95	9.04	9.55
5.....	10.56	10.42	10.48	10.40	10.40	10.50	10.60	10.45	10.56	10.88	10.20	9.35
6.....	10.71	10.60	10.48	10.40	10.40	10.46	10.62	10.63	10.53	11.35	10.58	9.77
7.....	10.77	10.88	10.48	10.40	10.40	10.45	10.57	10.75	11.88	10.20	9.04	9.63
8.....	10.84	10.67	10.48	10.40	10.40	10.49	10.52	10.68	10.10	10.26	9.88	9.67
9.....	11.36	10.22	10.48	10.40	10.40	10.47	10.50	10.57	11.36	10.56	9.83	10.00
10.....	10.87	10.27	10.40	10.40	10.40	10.45	-	10.59	10.75	10.34	9.80	8.50
11.....	11.26	10.27	10.40	10.40	10.40	10.45	-	10.65	10.76	9.96	9.24	9.85
12.....	11.56	10.62	10.40	10.40	10.40	10.44	-	9.98	10.87	9.70	9.95	9.67
13.....	11.11	10.60	10.40	10.40	10.40	10.46	-	10.43	10.64	9.75	9.80	9.25
14.....	10.89	10.57	10.40	10.40	10.40	10.48	-	10.78	10.76	11.70	10.00	8.97
15.....	10.25	10.67	10.40	10.40	10.40	10.45	10.55	10.66	10.10	10.26	9.53	11.57
16.....	10.81	10.62	10.40	10.40	10.40	10.47	10.58	10.64	10.16	9.88	9.80	9.50
17.....	10.86	10.62	10.40	10.40	10.40	10.45	10.60	11.95	10.06	10.70	9.33	8.73
18.....	10.64	10.57	10.40	10.40	10.44	10.45	10.62	12.80	10.56	9.96	10.00	9.85
19.....	10.81	10.57	10.40	10.40	10.37	10.46	10.63	10.85	11.40	9.95	10.03	9.30
20.....	10.26	10.57	10.40	10.40	10.45	10.44	10.65	10.87	11.05	9.90	10.10	9.37
21.....	11.81	10.57	10.40	10.40	10.47	10.44	10.68	11.20	10.16	9.98	9.85	9.85
22.....	11.86	10.59	10.40	10.40	10.42	10.46	10.70	10.76	10.01	10.17	9.40	9.55
23.....	11.34	10.59	10.40	10.40	10.45	10.45	10.72	10.35	11.84	11.13	10.05	9.90
24.....	10.86	10.59	10.40	10.40	10.44	10.47	10.65	10.26	12.30	10.36	9.30	9.57
25.....	10.81	10.52	10.40	10.40	10.47	10.48	10.68	9.90	11.94	10.33	9.13	9.20
26.....	10.86	10.52	10.40	10.40	10.45	10.50	10.66	12.30	10.56	10.32	8.73	9.45
27.....	10.71	10.52	10.40	10.40	10.44	10.50	10.54	10.65	9.90	10.10	9.80	9.87
28.....	10.61	10.52	10.40	10.40	10.44	10.51	11.43	10.36	10.65	10.50	9.35	9.63
29.....	10.41	10.47	10.40	10.40	-	10.51	10.46	10.68	10.43	10.42	9.23	11.05
30.....	10.65	10.47	10.40	10.40	-	10.50	10.56	11.35	10.36	9.88	9.13	9.77
31.....	10.51	-	10.40	10.40	-	10.50	-	11.14	-	9.72	9.05	-

Add 820.00 to obtain elevation in feet, Geodetic Survey of Canada datum, 1928 adjustment.

Location: Lat. 51° 37' 10", long. 99° 36' 45", in NW. 1/4 sec. 35, tp. 30, rge. 16, W. 1st Mer., Manitoba, fourteen miles east of Winnipegosis. Gauge: Staff; elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. Period of Record: October to December 1950 and December 1952 to date. Extremes Recorded: Daily - Maximum, 9 June 1955, 834.41 feet, Minimum, 25 October 1950, 829.03 feet.

Daily Elevations in Feet for Water Year 1957-58												
Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	10.35	10.66	10.40	-	-	10.43	10.42	-	-	9.69	-	-
2.....	-	-	-	10.42	-	-	-	-	-	-	9.79	9.79
3.....	-	-	10.38	-	10.34	-	10.44	-	10.45	10.09	-	-
4.....	-	-	-	10.40	-	10.45	-	-	-	-	-	9.71
5.....	10.75	-	10.45	-	10.34	-	10.44	10.45	10.01	9.99	10.74	-
6.....	-	-	-	-	-	10.42	-	-	-	-	-	9.89
7.....	-	-	-	10.42	10.34	-	-	10.48	10.25	-	9.43	-
8.....	10.79	-	-	10.30	-	10.41	10.45	-	-	9.89	-	-
9.....	-	-	10.44	-	-	-	-	-	-	-	9.61	9.73
10.....	9.85	-	-	10.29	10.39	-	10.44	10.38	10.85	10.99	-	-
11.....	-	-	10.41	-	-	10.39	-	-	-	-	9.98	9.71
12.....	10.29	-	-	-	10.36	-	-	-	10.73	9.45	-	-
13.....	-	-	-	10.34	-	10.41	-	10.85	-	-	9.39	9.65
14.....	10.17	-	10.41	-	10.35	-	-	-	10.02	-	-	-
15.....	-	-	-	10.34	-	10.44	-	9.94	-	9.89	9.15	-
16.....	-	-	-	-	-	-	-	-	-	-	-	9.53
17.....	10.75	-	10.35	10.27	10.34	10.41	-	10.46	10.01	10.98	-	-
18.....	-	-	-	-	-	-	-	-	-	-	9.79	9.52
19.....	10.81	-	10.39	-	10.33	10.40	-	-	10.69	9.49	-	-
20.....	-	-	-	10.30	-	-	-	10.53	-	-	-	-
21.....	-	-	10.27	-	-	10.41	-	-	10.38	-	9.71	-
22.....	11.37	-	-	10.31	10.34	-	-	-	-	9.76	-	9.69
23.....	-	-	-	-	-	-	-	11.02	10.49	-	9.76	-
24.....	10.81	-	10.40	10.30	-	10.43	10.55	11.02	-	9.91	-	9.85
25.....	-	-	-	-	10.37	-	10.44	-	10.51	-	9.85	-
26.....	10.69	-	10.44	-	-	10.42	10.43	-	-	9.98	-	-
27.....	-	-	-	10.35	10.46	-	-	10.45	9.79	-	9.87	9.57
28.....	10.59	-	10.49	-	-	10.41	-	-	-	-	-	-
29.....	-	-	-	10.36	-	-	-	10.05	-	10.54	9.92	-
30.....	10.42	-	-	-	-	-	-	-	-	-	-	9.89
31.....	-	-	10.45	10.33	-	-	-	10.74	-	9.64	-	-

Add 820.00 to obtain elevation in feet, Geodetic Survey of Canada datum, 1928 adjustment.

WATERHEN LAKE AT SKOWNAN - STATION No. 5LH₈

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Location: Lat. 51° 14' 25", long. 99° 33' 50", Manitoba, in Waterhen Indian Reserve No. 45, one mile northeast of Roman Catholic Church. Gauge: Staff; elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. Period of Record: 1951 to date. Extremes Recorded: Daily - Maximum, 9 April 1955, 830.30 feet, Minimum, 10 September 1958, 825.79 feet.

Daily Elevations in Feet for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	-	8.01	-	-	6.92	6.74	6.58	7.06	-	6.80	6.50	5.90
2.....	-	8.02	7.03	7.02	-	-	6.61	7.06	7.19	6.78	6.53	5.82
3.....	-	-	7.03	7.03	6.91	6.71	6.64	7.06	7.17	6.75	-	6.06
4.....	8.00	8.02	7.03	7.03	6.92	6.71	6.69	-	7.14	6.74	6.41	6.05
5.....	8.11	7.96	7.02	-	6.92	6.69	6.72	7.10	7.12	6.76	6.41	6.00
6.....	-	7.99	7.02	7.02	6.92	6.68	-	7.12	7.12	-	6.40	6.05
7.....	8.14	8.01	7.02	7.01	6.90	6.68	6.72	7.14	7.10	6.72	6.40	-
8.....	8.16	7.97	-	7.01	6.88	6.66	6.74	7.16	-	6.72	6.38	6.02
9.....	-	7.96	7.02	7.00	-	-	6.74	7.14	7.12	6.72	6.36	5.96
10.....	8.09	-	7.02	7.00	6.86	6.64	6.75	7.14	7.10	6.75	-	5.79
11.....	8.02	-	7.02	7.00	6.85	6.64	6.78	-	7.07	6.66	6.33	6.10
12.....	7.96	-	7.02	-	6.84	6.64	6.74	7.15	7.07	6.68	6.33	6.01
13.....	-	-	7.02	6.99	6.84	6.64	-	7.36	7.04	-	6.32	5.90
14.....	7.86	-	7.01	6.98	6.82	6.62	6.80	7.35	7.00	6.90	6.32	-
15.....	8.06	-	-	6.97	6.82	6.62	6.82	7.34	-	6.71	6.31	6.12
16.....	8.06	-	7.02	6.96	-	-	6.82	7.33	6.99	6.63	6.30	6.00
17.....	8.04	-	7.01	6.95	6.81	6.62	6.89	7.34	6.97	6.63	-	5.82
18.....	8.10	6.97	7.00	6.95	6.81	6.60	6.91	-	6.97	6.62	6.28	5.90
19.....	8.07	6.97	7.01	-	6.79	6.60	6.93	-	6.96	6.60	6.28	5.82
20.....	-	6.96	7.01	6.95	6.79	6.59	-	7.33	6.96	-	6.24	5.84
21.....	8.10	6.96	7.01	6.95	6.78	6.59	6.98	7.32	6.96	6.62	6.18	-
22.....	8.07	6.97	-	6.95	6.76	6.58	7.00	7.28	-	6.62	6.19	6.02
23.....	8.06	6.96	7.02	6.94	-	-	7.02	7.26	6.96	6.65	-	6.10
24.....	8.09	-	7.02	6.93	6.76	6.58	7.03	7.24	6.90	6.60	-	6.04
25.....	7.91	7.02	-	6.93	6.76	6.58	7.03	-	6.88	6.58	6.09	5.95
26.....	7.96	7.02	7.02	-	6.75	6.58	7.02	7.28	6.85	6.53	6.04	6.02
27.....	-	7.03	7.02	6.92	6.75	6.58	-	7.28	6.84	-	6.10	6.05
28.....	7.99	7.02	7.03	6.92	6.74	6.57	7.04	7.26	6.84	6.58	6.05	-
29.....	7.97	7.03	-	6.92	-	6.56	7.05	7.27	-	6.54	6.29	6.06
30.....	7.97	7.04	7.03	6.92	-	-	7.07	7.24	6.83	6.51	5.99	5.99
31.....	7.99	-	7.03	6.92	-	-	-	7.21	-	6.52	-	-

Add 820.00 to obtain elevation in feet, Geodetic Survey of Canada datum, 1928 adjustment.

WATERHEN RIVER BELOW WATERHEN LAKE - STATION No. 5LH₅

Location: Lat. 51° 50' 00", long. 99° 32' 45", in sec. 17, tp. 33, rge. 15, W. 1st Mer., Manitoba, approximately ten miles below Waterhen Lake. Drainage Area: 22,000 square miles. Gauge: Staff; elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. Measurement of Discharge: From boat. Period of Record: November 1950 to date (Mean monthly discharges only June 1914 to October 1950). Average Discharge: (43 years) - 2,640 cfs. Extremes Recorded: Daily - Maximum, 31 October 1954, 12,550 cfs (elevation 822.78 ft.), Minimum, March 1930 and March 1942, 5 cfs (estimated). Remarks: Records good during open-water period; fair during ice period. Mean monthly discharges, based on elevations of Lake Winnipegosis, were computed for the period June 1914 to October 1950.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	2,300e	3,450	2,380	1,480	730	543	913	2,960	3,350e	3,000e	2,420e	1,650
2.....	1,840e	3,400e	2,350	1,460	725	529	1,050	2,660	3,100	3,100	2,500	1,830e
3.....	1,840e	3,340e	2,330	1,460	710	518	1,240	2,820e	4,000e	2,900	2,100e	2,020
4.....	1,840e	3,240	2,320	1,460	705	536	1,370	3,060	4,450	2,900	1,800	1,900e
5.....	2,220e	3,320e	2,300	1,350	700	554	1,670	3,300	3,600	3,100e	2,400e	1,800
6.....	3,420e	3,450	2,250	1,340	690	568	2,030	3,480e	3,720e	3,350	2,900	1,950
7.....	4,100	3,530e	2,270	1,310	665	560	2,460b	3,550	3,850	2,900	2,600e	1,980e
8.....	3,830e	3,660	2,250	1,300	641	546	2,700	3,450e	3,720e	2,900	2,500	2,020
9.....	3,660	3,420e	2,240	1,280	625	532	2,720e	3,300	3,600	2,800e	2,500	2,060e
10.....	3,450	3,120	2,200	1,260	617	529	2,740	2,660e	3,600	2,700	2,500e	2,080e
11.....	3,450e	3,040	2,220	1,250	593	529	2,940	2,070e	3,650e	2,500e	2,500	2,100
12.....	3,450	3,080e	2,220	1,190	589	515	2,740	1,770	3,720	2,300	2,320e	1,650e
13.....	3,470e	3,240	2,220	1,170	582	498	2,740e	3,720	3,600	2,900e	2,260	1,250
14.....	3,530e	3,140	2,170	1,150	582	512	2,740	4,450	3,550e	3,600	2,240e	1,720e
15.....	3,640e	3,160e	2,140	1,110	582	522	3,150	3,100e	3,480e	2,700	2,200	2,500
16.....	3,660	3,200e	2,140	1,070	571	522	2,800	2,100	3,350	2,500	2,200	1,950e
17.....	3,550	3,240	2,120	1,030	554	522	2,960e	4,450	3,350e	2,640	2,380e	1,650
18.....	3,570e	3,280b	2,110	1,000	554	512	3,150	5,110e	3,350	2,900	2,500	1,650
19.....	3,590e	3,340	2,090	984	540	498	3,480e	5,650	4,150	2,700e	2,200	1,580e
20.....	3,610e	3,240	2,080	958	574	504	3,650	4,150	3,350	2,500	2,070e	1,500
21.....	3,640e	3,340	2,040	938	605	508	3,650e	4,750	3,350	2,500	1,950	2,070
22.....	3,680e	3,220	1,940	932	568	512	3,650	3,850	3,350e	2,700	2,020e	1,940e
23.....	3,720e	3,160	1,840	907	554	512	3,910	3,520e	3,350	2,700e	2,100	1,800
24.....	3,760	3,120	1,760	877	532	529	3,600	3,220e	3,250e	2,700	2,100e	2,020
25.....	3,420e	3,040	1,700	820	564	554	3,580e	3,100	3,180e	2,580e	2,100	1,920e
26.....	3,140	2,980	1,650	785	597	574	3,520	6,300	3,100	2,500	1,650	1,800
27.....	3,240e	2,940	1,590	780	578	621	3,650	5,050e	3,300e	2,580e	1,840e	2,060e
28.....	3,450	2,880	1,520	780	560	670	3,480e	3,300	3,600	2,700	2,100	2,440e
29.....	3,320e	2,820	1,540	765	-	695	3,220e	3,800	3,100	2,900	2,300	2,800
30.....	3,240	2,810	1,560	755	-	730	3,060e	3,850	2,900	2,580e	2,000e	1,880e
31.....	3,320e	-	1,490	740	-	800	-	3,550e	-	2,300	1,830e	-
Mean	3,290e	3,210	2,030	1,090	610	556	2,820	3,620	3,500e	2,760e	2,230e	1,920e
Per sq. mi.	0.149	0.146	0.092	0.050	0.028	0.025	0.128	0.165	0.159	0.125	0.101	0.087
Acre-feet	202,200	190,800	125,000	66,820	33,890	34,220	167,700	222,300	208,300	169,800	137,000	114,200

The Year..... Discharge: Daily - Maximum 26 May, 6,300 (elevation 820.40)

- Minimum 13 March, 498

Mean 2,310; Per Square Mile 0.105

Runoff: Acre-feet 1,572,000; Depth in inches on drainage area 1.428

b - Ice conditions 18 November to 7 April.

e - Estimated.

Location: Lat. 50° 11' 15", long. 99° 06' 10", in SW. 1/4 sec. 18, tp. 14, rge. 12, W. 1st Mer., Manitoba, three and three-quarters miles south of Keyes. Drainage Area: 610 square miles. Gauge: Wire-weight. Measurement of Discharge: From bridge or by wading. Period of Record: March to October, 1958. Extremes Recorded: Daily - Maximum, 29 March 1958, 435 cfs, Minimum, 17 to 28 August 1958, 1 cfs. Remarks: Records good during open-water period; fair during ice period.

Daily Discharge in Cubic Feet per Second for Calendar Year

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	344	57	29	14	3	2	13	-	-
2.....	-	-	-	291	54	29	13	4	2	16	-	-
3.....	-	-	-	264	54	27	13	3	2	18	-	-
4.....	-	-	-	255	54	26	17	3	2	21	-	-
5.....	-	-	-	248	54	24	18	3	2	22	-	-
6.....	-	-	-	243b	57	22	22	3	2	24	-	-
7.....	-	-	-	217	58	22	23	2	2	25	-	-
8.....	-	-	-	203	58	21	25	2	2	23	-	-
9.....	-	-	-	168	57	21	20	2	2	20	-	-
10.....	-	-	-	146	55	20	18	2	2	20	-	-
11.....	-	-	-	131	55	20	17	2	2	20	-	-
12.....	-	-	-	131	54	20	16	2	2	19	-	-
13.....	-	-	-	98	54	19	16	2	2	18	-	-
14.....	-	-	-	84	52	18	15	2	2	16	-	-
15.....	-	-	-	74	46	18	13	2	3	18	-	-
16.....	-	-	-	72	43	17	13	2	3	20	-	-
17.....	-	-	-	64	43	16	13	1	3	21	-	-
18.....	-	-	-	63	41	16	13	1	3	22	-	-
19.....	-	-	-	60	40	16	12	1	3	26	-	-
20.....	-	-	-	59	36	15	12	1	3	32	-	-
21.....	-	-	-	58	35	14	12	1	3	36	-	-
22.....	-	-	-	57	29	13	11	1	3	44	-	-
23.....	-	-	-	57	28	13	9	1	4	50	-	-
24.....	-	-	-	55	27	13	8	1	5	54	-	-
25.....	-	-	-	55	27	13	8	1	6	55	-	-
26.....	-	-	191b	55	27	14	7	1	7	60	-	-
27.....	-	-	284	54	26	15	6	1	7	67	-	-
28.....	-	-	359	54	26	16	5	1	8	64	-	-
29.....	-	-	435	53	26	16	5	2	9	60	-	-
30.....	-	-	412	54	26	15	4	2	11	58	-	-
31.....	-	-	374	-	29	-	4	2	-	54	-	-
Mean	-	-	-	126	42.8	18.6	13.0	1.8	3.6	32.8	-	-
Per sq. mi.	-	-	-	0.207	0.070	0.030	0.021	0.003	0.006	0.054	-	-
Acre-feet	-	-	-	7,470	2,630	1,110	797	113	216	2,020	-	-

The Period.....Discharge: Daily - Maximum 29 March, 435
 (214 days) - Minimum 17 to 28 August, 1
 Mean 33.8; Per Square Mile 0.055
 Runoff: Acre-feet 14,360; Depth in inches on drainage area 0.440

b - Ice conditions 26 March to 6 April.

WHITEMUD RIVER NEAR WOODSIDE - STATION No. 5LL₆

Location: Lat. 50° 09' 25", long. 98° 41' 45", in SE. 1/4 sec. 1, tp. 14, rge. 10, W. 1st Mer., Manitoba, three and one-half miles southeast of Woodside. Drainage Area: 2,360 square miles. Gauge: Wire-weight. Measurement of Discharge: From bridge or by wading. Period of Record: March to October, 1958. Extremes Recorded: Daily - Maximum, 1 April 1958, 1,380 cfs, Minimum, August and September 1958, 4 cfs. Remarks: Records good during open-water period; fair during ice period.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	1,380b	160	72	45	8	10	8	-	-
2.....	-	-	-	1,350b	160	84	44	9	8	11	-	-
3.....	-	-	-	1,080	158	80	44	8	8	13	-	-
4.....	-	-	-	1,060	157	78	44	8	8	14	-	-
5.....	-	-	-	922	156	76	47	7	7	14	-	-
6.....	-	-	-	800	155	68	54	7	7	15	-	-
7.....	-	-	-	692	154	70	72	6	7	15	-	-
8.....	-	-	-	596	151	68	118	6	7	25	-	-
9.....	-	-	-	530	149	66	116	6	8	27	-	-
10.....	-	-	-	467	145	65	98	6	8	29	-	-
11.....	-	-	-	415	145	63	89	6	8	30	-	-
12.....	-	-	-	372	145	61	70	5	8	31	-	-
13.....	-	-	-	343	145	58	74	5	8	32	-	-
14.....	-	-	-	317	145	55	78	5	8	46	-	-
15.....	-	-	-	299	145	54	77	4	8	80	-	-
16.....	-	-	-	291	140	53	75	4	8	84	-	-
17.....	-	-	-	287	140	52	74	4	8	48	-	-
18.....	-	-	-	277	132	51	73	4	8	33	-	-
19.....	-	-	-	250	131	50	70	4	9	38	-	-
20.....	-	-	-	236	128	49	65	4	10	50	-	-
21.....	-	-	-	226	120	48	60	4	9	56	-	-
22.....	-	-	-	216	109	44	54	6	8	58	-	-
23.....	-	-	-	212	115	42	49	7	7	60	-	-
24.....	-	-	-	209	99	39	45	7	6	55	-	-
25.....	-	-	-	206	92	39	34	7	5	56	-	-
26.....	-	-	-	160	91	42	25	8	5	55	-	-
27.....	-	-	118b	160	85	45	24	8	4	54	-	-
28.....	-	-	240	160	82	47	21	8	4	52	-	-
29.....	-	-	413	160	78	45	20	8	6	49	-	-
30.....	-	-	755	160	76	45	16	12	6	47	-	-
31.....	-	-	1,180	-	74	-	8	11	-	44	-	-
Mean	-	-	-	461	128	57	58	6.5	7.4	39.6	-	-
Per sq. mi.	-	-	-	0.195	0.054	0.024	0.025	0.003	0.003	0.017	-	-
Acre-feet	-	-	-	27,440	7,860	3,390	3,540	401	438	2,440	-	-

The Period.....Discharge: Daily - Maximum 1 April, 1,380
 (214 days) - Minimum in August and September, 4
 Mean 107; Per Square Mile 0.045
 Runoff: Acre-feet 45,500; Depth in inches on drainage area 0.362

b - Ice conditions 27 March to 2 April.

Location: Lat. 51° 37' 15", long. 99° 34' 30", in NE. 1/4 sec. 36, tp. 30, rge. 16, W. 1st Mer., Manitoba, ten miles north of Toutes Aides. Gauge: Staff; elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. Period of Record: September 1913 and May 1952 to date. Extremes Recorded: Daily - Maximum, 31 May 1955, 816.02 feet, Minimum, 4 October 1952, 810.24 feet.

Daily Elevations in Feet for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	2.89	2.67	-	2.70	-	-	-	-	2.26	1.95	1.62	1.80
2.....	2.96	2.66	2.64	-	-	-	2.54	-	2.28	1.94	1.62	1.79
3.....	3.01	2.65	-	2.69	2.65	2.57	-	-	2.30	1.96	1.61	1.78
4.....	3.03	2.63	2.66	-	-	-	2.55	2.19	2.31	1.99	1.60	1.77
5.....	3.06	2.61	-	-	2.64	2.56	-	2.20	2.30	2.03	1.62	1.78
6.....	3.01	2.59	2.67	2.69	-	-	-	2.21	2.30	1.97	1.61	1.80
7.....	2.96	-	-	-	2.63	2.56	2.56	2.19	2.29	1.93	1.60	1.81
8.....	2.91	-	-	2.70	-	-	-	2.22	2.28	1.88	1.62	1.80
9.....	2.90	-	2.66	-	-	-	2.56	2.25	2.26	1.90	1.66	1.82
10.....	2.89	-	-	2.70	2.62	2.56	-	2.27	2.25	1.94	1.72	1.83
11.....	2.91	-	2.67	-	-	-	2.57	2.31	2.21	1.98	1.71	1.84
12.....	2.96	-	-	-	2.61	2.55	-	2.35	2.20	2.02	1.65	1.84
13.....	2.93	-	2.69	2.69	-	-	-	2.34	2.18	2.06	1.65	1.86
14.....	2.95	-	-	-	2.60	2.54	-	2.32	2.17	2.09	1.65	1.83
15.....	2.91	-	-	2.68	-	-	-	2.29	2.15	2.06	1.64	1.79
16.....	2.89	-	2.71	-	-	-	-	2.26	2.13	2.02	1.63	1.78
17.....	2.86	-	-	2.68	2.61	2.53	-	2.23	2.10	1.98	1.63	1.79
18.....	2.85	2.61	2.72	-	-	-	-	2.20	2.09	1.96	1.62	1.79
19.....	2.83	-	-	-	2.61	2.54	-	2.18	2.07	1.92	1.62	1.78
20.....	2.81	2.60	2.71	2.69	-	-	-	2.17	2.03	1.91	1.61	1.77
21.....	2.78	-	-	-	2.61	2.54	-	2.21	2.01	1.89	1.61	1.76
22.....	2.84	2.63	-	2.69	-	-	-	2.21	2.00	1.89	1.60	1.75
23.....	2.76	-	2.71	-	-	-	-	2.20	1.98	1.86	1.60	1.73
24.....	2.73	-	-	2.68	2.60	2.53	-	2.19	1.96	1.84	1.62	1.72
25.....	2.69	2.64	2.70	-	-	-	2.34	2.20	1.94	1.79	1.66	1.73
26.....	2.66	-	-	-	2.60	2.53	2.33	2.17	1.92	1.76	1.68	1.74
27.....	2.65	2.63	2.69	2.68	-	-	2.32	2.19	1.93	1.72	1.70	1.73
28.....	2.65	-	-	-	2.61	2.52	2.31	2.21	1.95	1.72	1.75	1.72
29.....	2.64	2.62	-	2.67	-	-	2.31	2.23	1.96	1.69	1.80	1.68
30.....	2.67	-	2.71	-	-	-	-	2.24	1.96	1.65	1.81	1.68
31.....	2.69	-	-	2.67	-	2.53	-	2.24	-	1.63	1.81	-

Add 810.00 to obtain elevation in feet, Geodetic Survey of Canada datum, 1928 adjustment.

LAKE MANITOBA AT DELTA - STATION No. 5LL₃

Location: Lat. 50° 11' 15", long. 98° 19' 00", in NE. 1/4 sec. 14, tp. 14, rge. 7, W. 1st Mer., Manitoba, at breakwater.
 Gauge: Staff; elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. Period of Record: July 1914 to date. Extremes Recorded: Daily - Maximum, 8 June 1955, 816.55 feet, Minimum, 20 June 1942, 809.50 feet.

Daily Elevations in Feet for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	3.18	3.27	3.03	2.93	2.99	2.99	2.89	3.23	3.20	2.68	2.22	2.11
2.....	2.97	3.27	2.71	2.91	2.96	2.97	2.88	3.24	2.89	1.87	2.53	1.94
3.....	2.74	3.20	3.07	2.90	2.94	2.97	2.97	3.34	2.87	2.70	2.50	1.98
4.....	2.73	3.11	3.05	2.91	2.95	3.00	2.98	3.28	3.20	2.59	2.64	2.00
5.....	3.48	3.11	3.06	2.91	2.98	2.97	2.98	3.25	2.69	2.67	2.04	2.02
6.....	3.27	3.16	3.02	-	2.97	3.00	2.99	3.28	3.13	3.14	2.18	2.04
7.....	3.78	3.68	3.03	2.91	2.89	2.98	2.89	3.29	2.61	3.68	2.32	2.29
8.....	3.48	3.93	3.03	2.91	2.97	2.98	2.73	3.24	2.90	3.68	2.22	2.09
9.....	3.43	3.58	3.08	2.86	2.96	2.97	2.53	2.63	3.19	2.56	2.40	2.87
10.....	3.08	3.16	2.94	2.88	2.97	2.99	2.63	2.83	3.21	2.35	2.19	2.02
11.....	2.96	3.23	2.31	2.94	2.96	2.99	2.63	3.28	3.33	2.60	2.14	1.92
12.....	2.98	3.28	2.70	2.93	2.97	2.99	2.63	2.42	2.78	-	2.18	2.07
13.....	2.92	3.28	2.80	-	2.96	2.97	2.57	2.38	3.22	2.75	2.22	2.18
14.....	2.73	3.26	2.91	2.92	2.99	2.99	2.58	2.68	2.75	3.37	2.23	1.99
15.....	3.05	3.25	2.97	2.92	2.97	2.99	2.65	2.51	2.66	2.63	2.10	3.18
16.....	3.40	3.23	2.95	2.92	2.95	2.98	2.46	2.47	2.64	2.50	2.19	2.28
17.....	3.41	3.16	2.91	2.92	2.97	2.99	2.47	3.08	3.17	2.65	2.07	1.97
18.....	2.93	2.78	2.94	2.92	2.96	2.98	3.26	3.84	2.89	2.57	2.02	2.02
19.....	2.93	3.16	2.92	2.88	2.89	-	3.26	3.93	2.84	2.53	2.17	1.94
20.....	3.04	3.46	2.95	2.87	2.91	2.99	3.23	3.35	2.89	2.22	1.99	1.89
21.....	3.08	3.16	2.91	2.88	2.89	3.00	3.17	2.95	2.68	2.53	2.08	1.78
22.....	3.48	3.08	2.94	2.94	2.97	2.89	3.03	3.37	-	2.35	1.97	1.78
23.....	3.53	3.58	2.94	2.91	2.90	2.87	3.37	2.92	-	2.32	2.38	1.82
24.....	3.63	3.16	2.94	2.89	2.97	2.88	3.31	2.92	2.99	2.58	2.32	2.68
25.....	3.42	2.98	2.94	-	2.90	2.87	2.83	2.84	3.48	2.42	2.27	1.92
26.....	3.21	3.12	2.94	-	2.98	2.88	2.75	3.37	2.85	3.29	2.08	1.96
27.....	3.21	3.13	2.99	3.01	3.00	2.87	1.66	3.30	2.64	3.39	3.12	1.92
28.....	3.29	3.13	2.99	3.01	2.99	2.88	-	-	2.66	2.51	2.28	1.91
29.....	3.23	3.16	2.96	2.98	-	2.86	3.28	2.88	2.72	3.23	2.39	2.17
30.....	3.28	2.93	2.95	2.97	-	2.87	3.25	3.22	2.68	2.39	2.30	2.84
31.....	3.28	-	2.92	2.98	-	2.89	-	3.33	-	2.20	2.22	-

Add 810.00 to obtain elevation in feet, Geodetic Survey of Canada datum, 1928 adjustment.

Location: Lat. 51° 26' 26", long. 98° 48' 13", in sec. 33, tp. 28, rge. 10, W. 1st Mer., Manitoba, at intake to Canada Cement Company's Power House. Gauge: Staff; elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. Period of Record: August 1923 to date. Extremes Recorded: Daily - Maximum, 8 July 1955 (wind), 816.38 feet. Minimum, 2 and 3 November 1944, 810.05 feet.

Daily Elevations in Feet for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	3.44	3.22	3.22	3.18	3.13	3.06	3.02	2.80	2.77	2.60	2.47	2.46
2.....	3.50	3.12	3.23	3.18	3.14	3.06	3.03	2.86	3.16	2.66	2.42	2.66
3.....	3.70	3.24	3.26	3.19	3.12	3.07	3.00	2.84	2.98	2.60	2.49	2.44
4.....	3.82	3.24	3.24	3.19	3.10	3.06	3.00	2.79	2.65	2.50	2.60	2.28
5.....	3.78	3.29	3.22	3.20	3.12	3.05	3.00	3.02	2.79	2.65	2.66	2.34
6.....	3.72	3.30	3.23	3.17	3.12	3.04	3.02	3.08	2.89	2.38	2.42	2.30
7.....	3.56	3.02	3.22	3.16	3.11	3.05	3.02	3.04	2.65	2.60	2.30	2.32
8.....	3.46	3.02	3.20	3.18	3.11	3.06	3.04	3.00	2.68	2.70	2.47	2.24
9.....	3.32	3.04	3.20	3.19	3.11	3.06	3.05	2.98	2.81	2.76	2.38	2.04
10.....	3.36	3.20	3.20	3.18	3.10	3.05	3.08	3.05	2.65	2.84	2.47	2.34
11.....	3.48	3.21	3.23	3.16	3.10	3.04	3.06	3.05	2.58	2.70	2.50	2.18
12.....	3.52	3.22	3.23	3.18	3.10	3.02	3.06	3.06	2.60	2.72	2.38	2.22
13.....	3.64	3.18	3.25	3.17	3.09	3.02	3.07	3.15	2.48	2.74	2.32	2.28
14.....	3.66	3.22	3.22	3.12	3.09	3.03	3.08	3.10	2.57	2.60	2.20	2.38
15.....	3.74	3.20	3.21	3.12	3.09	3.02	3.08	3.06	2.69	2.68	2.32	2.32
16.....	3.58	3.12	3.20	3.12	3.09	3.02	3.00	3.10	2.70	2.70	2.25	2.12
17.....	3.34	3.11	3.22	3.12	3.08	3.02	3.08	3.14	2.72	2.76	2.26	2.32
18.....	3.42	3.20	3.23	3.12	3.08	3.02	3.09	3.00	2.80	2.66	2.32	2.34
19.....	3.40	3.24	3.22	3.12	3.08	3.02	3.00	2.80	2.60	2.64	2.34	2.30
20.....	3.42	3.08	3.19	3.12	3.08	3.02	3.00	2.70	2.60	2.70	2.22	2.62
21.....	3.34	3.02	3.18	3.12	3.08	3.03	2.90	2.80	2.68	2.68	2.10	2.52
22.....	3.17	3.08	3.22	3.12	3.08	3.03	2.88	2.56	2.66	2.70	2.16	2.24
23.....	3.04	2.92	3.18	3.13	3.09	3.01	2.75	2.72	2.50	2.80	2.06	2.10
24.....	3.06	3.06	3.20	3.14	3.08	3.01	2.74	2.76	2.43	2.70	2.19	1.86
25.....	3.05	3.12	3.19	3.14	3.09	3.00	2.83	2.90	2.14	2.56	2.20	2.04
26.....	3.14	3.18	3.18	3.13	3.06	3.00	2.99	2.80	2.40	2.48	2.24	2.04
27.....	3.32	3.15	3.17	3.12	3.04	2.99	3.00	2.64	2.60	2.60	2.22	2.04
28.....	3.22	3.22	3.17	3.12	3.06	3.00	2.88	2.86	2.60	2.60	2.20	2.00
29.....	3.32	3.20	3.18	3.12	-	3.00	2.88	2.76	2.53	2.40	2.24	1.94
30.....	3.32	3.24	3.22	3.12	-	3.00	2.70	2.75	2.59	2.40	2.10	1.84
31.....	3.42	-	3.18	3.13	-	3.00	-	2.64	-	2.60	2.30	-

Add 810.00 to obtain elevation in feet, Geodetic Survey of Canada datum, 1928 adjustment.

FAIRFORD RIVER AT FAIRFORD - STATION No. 5LM₁

Location: Lat. 51° 36' 00", long. 98° 42' 15", in sec. 29, tp. 30, rge. 9, W. 1st Mer., Manitoba. Drainage Area: 30,900 square miles. Gauge: Staff. Measurement of Discharge: From cableway. Period of Record: July 1912 to date (Mean monthly flow records only from 1921 to 1955). Average Discharge: (46 years) - 2,340 cfs. Extremes Recorded: Daily - Maximum, 8 July 1955, 11,900 cfs. Minimum, at various times 0 cfs. Revisions: Drainage area, W.R.P. 125. Remarks: Records good. Discharges based on elevations of Lake Manitoba at Steep Rock and controlled by Fairford dam at outlet.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	3,840	3,340	3,340	3,260	3,150	3,000	2,910	2,460	2,400	2,070	1,830	1,810
2.....	3,980	3,120	3,370	3,260	3,170	3,000	2,930	2,580	3,210	2,180	1,740	2,180
3.....	4,440	3,390	3,430	3,280	3,120	3,020	2,870	2,540	2,830	2,070	1,860	1,770
4.....	4,720	3,390	3,390	3,280	3,080	3,000	2,870	2,440	2,170	1,880	2,070	1,500
5.....	4,580	3,500	3,340	3,300	3,120	2,980	2,870	2,910	2,440	2,170	2,180	1,600
6.....	4,490	3,520	3,370	3,230	3,120	2,950	2,910	3,040	2,640	1,670	1,740	1,530
7.....	4,120	2,910	3,340	3,210	3,100	2,980	2,910	2,950	2,170	2,070	1,530	1,560
8.....	3,890	2,910	3,300	3,260	3,100	3,000	2,950	2,870	2,220	2,260	1,830	1,430
9.....	3,570	2,950	3,300	3,280	3,100	3,000	2,980	2,830	2,480	2,380	1,670	1,110
10.....	3,660	3,300	3,300	3,260	3,080	2,980	3,040	2,980	2,170	2,540	1,830	1,600
11.....	3,930	3,320	3,370	3,210	3,080	2,950	3,000	2,980	2,030	2,260	1,880	1,330
12.....	4,030	3,340	3,370	3,260	3,080	2,910	3,000	3,000	2,070	2,300	1,670	1,390
13.....	4,300	3,260	3,410	3,230	3,060	2,910	3,020	3,190	1,840	2,340	1,560	1,500
14.....	4,350	3,340	3,340	3,120	3,060	2,930	3,040	3,080	2,010	2,070	1,360	1,670
15.....	4,530	3,300	3,320	3,120	3,060	2,910	3,040	3,000	2,240	2,220	1,560	1,560
16.....	4,160	3,120	3,300	3,120	3,060	2,910	2,870	3,080	2,260	2,260	1,440	1,230
17.....	3,610	3,100	3,340	3,120	3,040	2,910	3,040	3,170	2,300	2,380	1,460	1,560
18.....	3,800	3,300	3,370	3,120	3,040	2,910	3,060	2,870	2,460	2,180	1,560	1,600
19.....	3,750	3,390	3,340	3,120	3,040	2,910	2,870	2,460	2,070	2,150	1,600	1,530
20.....	3,800	3,040	3,280	3,120	3,040	2,910	2,870	2,260	2,070	2,260	1,390	2,110
21.....	3,610	2,910	3,260	3,120	3,040	2,930	2,660	2,460	2,220	2,220	1,200	1,920
22.....	3,230	3,040	3,340	3,120	3,040	2,930	2,620	1,990	2,180	2,260	1,300	1,430
23.....	2,950	2,700	3,260	3,150	3,060	2,890	2,360	2,300	1,880	2,460	1,140	1,200
24.....	3,000	3,000	3,300	3,170	3,040	2,890	2,340	2,380	1,750	2,260	1,340	832
25.....	2,980	3,120	3,280	3,170	3,060	2,870	2,520	2,660	1,260	1,990	1,360	806
26.....	3,170	3,260	3,260	3,150	3,000	2,870	2,850	2,460	1,700	1,840	1,430	741
27.....	3,570	3,190	3,230	3,120	2,950	2,850	2,870	2,150	2,070	2,070	1,390	650
28.....	3,340	3,340	3,230	3,120	3,000	2,870	2,620	2,580	2,070	2,070	1,360	590
29.....	3,570	3,300	3,260	3,120	-	2,870	2,620	2,380	1,940	1,700	1,430	530
30.....	3,570	3,390	3,340	3,120	-	2,870	2,260	2,360	2,050	1,700	1,200	486
31.....	3,800	-	3,260	3,150	-	2,870	-	2,150	-	2,070	1,530	-
Mean	3,820	3,200	3,320	3,180	3,070	2,930	2,830	2,660	2,170	2,140	1,560	1,360
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	234,700	190,600	204,200	195,800	170,400	180,200	168,100	163,800	129,300	131,600	96,100	80,800

The Year..... Discharge: Daily - Maximum 4 October, 4,720 (elevation 813.82)
 - Minimum 30 September, 486 (elevation 811.84)
 Mean 2,690
 Runoff: Acre-feet 1,946,000

Controlled by Fairford Dam at outlet of Lake Manitoba.

Location: Lat. 51° 42' 30", long. 98° 39' 30", Manitoba, one and one-half miles southeast of St. Martin Station.
 Gauge: Staff; elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. Period of Record: August 1954 to date. Extremes Recorded: Daily - Maximum, 10 December 1954, 806.29 feet, Minimum, 30 September 1958, 800.15 feet.

Daily Elevations in Feet for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	2.61	2.11	-	2.83	-	-	-	1.48	1.58	1.35	1.35	1.30
2.....	2.51	2.11	3.07	-	-	-	-	1.69	1.83	1.42	1.25	1.35
3.....	2.71	2.11	-	3.17	3.32	3.29	-	1.68	-	1.41	1.25	1.26
4.....	2.81	2.21	-	-	-	-	1.53	1.78	1.51	1.35	1.40	1.30
5.....	2.81	2.11	-	-	-	-	-	1.84	1.66	1.25	1.41	1.29
6.....	2.61	2.01	3.27	3.22	-	-	-	1.80	1.75	1.25	1.30	1.20
7.....	2.61	2.01	-	-	3.22	3.17	2.33	1.79	1.60	1.32	1.35	1.25
8.....	2.51	2.01	-	-	-	-	-	1.79	1.66	1.49	1.30	1.30
9.....	2.41	-	2.97	-	-	-	-	1.79	1.66	1.54	1.35	0.95
10.....	2.41	-	-	3.27	3.17	3.17	-	2.33	1.45	1.61	1.32	1.12
11.....	2.41	2.41	-	-	-	3.14	2.23	2.23	1.45	1.60	1.10	1.06
12.....	2.51	-	-	-	-	-	-	1.81	1.47	1.65	1.15	1.15
13.....	2.71	-	3.07	3.27	-	-	-	1.82	1.46	1.45	1.10	1.21
14.....	2.71	-	-	-	3.46	3.17	2.23	1.81	1.46	1.51	1.00	1.30
15.....	2.61	2.21	-	3.28	-	-	2.13	1.79	1.40	1.60	1.10	1.00
16.....	2.51	-	2.87	-	-	-	2.13	2.25	1.55	1.55	1.15	1.05
17.....	2.51	-	-	3.27	3.35	3.27	1.80	2.83	1.65	1.55	1.15	1.10
18.....	2.41	2.21	-	-	-	-	1.79	2.75	1.69	1.52	1.10	1.30
19.....	2.41	-	-	-	-	-	1.78	2.20	1.65	1.55	1.05	1.35
20.....	2.41	-	2.67	3.27	-	-	1.87	2.21	1.47	1.56	0.95	1.35
21.....	2.51	-	-	-	3.35	3.37	1.87	2.21	1.46	1.45	0.95	1.35
22.....	2.41	2.51	-	-	-	-	1.77	2.76	1.55	1.56	1.00	1.35
23.....	2.11	-	3.07	-	-	-	1.67	2.51	1.40	1.55	1.00	1.00
24.....	2.11	-	-	3.27	3.32	3.37	1.57	2.61	1.15	1.55	1.10	0.65
25.....	2.11	2.67	-	-	-	-	1.67	2.61	1.00	1.45	1.05	0.65
26.....	2.11	-	-	-	-	-	1.77	2.21	0.90	1.33	1.00	0.50
27.....	2.11	-	3.17	3.27	-	3.27	1.77	2.41	1.00	1.35	1.00	0.45
28.....	2.11	-	-	-	3.27	-	1.47	2.62	1.01	1.35	1.00	0.40
29.....	2.11	3.27	-	-	-	-	1.47	2.62	1.22	1.24	1.00	0.19
30.....	2.11	-	3.17	-	-	-	1.32	2.62	1.03	1.31	0.95	0.15
31.....	2.21	-	-	3.27	-	2.83	-	-	-	1.40	1.25	-

Add 800.00 to obtain elevation in feet, Geodetic Survey of Canada datum, 1928 adjustment.

LAKE ST. MARTIN AT SANDY BAY - STATION No. 5LM₃

Location: Lat. 51° 42', long. 98° 33', Manitoba, in Little Saskatchewan Indian Reserve 48. Gauge: Staff; elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. Period of Record: June to September 1950 and August 1954 to date. Extremes Recorded: Daily - Maximum, 27 March 1955, 803.54 feet, Minimum, 30 September 1958, 797.39 feet.

Daily Elevations in Feet for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	-	9.21	-	9.01	9.80	10.00	10.09	-	8.53	-	7.86	-
2.....	-	9.27	-	9.03	9.78	10.00	10.07	-	8.50	-	7.86	-
3.....	9.53	9.25	-	9.04	9.79	10.02	10.06	-	8.53	-	7.86	-
4.....	9.51	9.26	-	9.07	9.79	10.03	10.06	-	8.37	-	7.84	-
5.....	9.51	9.19	9.11	9.11	9.79	10.03	10.04	-	8.37	-	7.80	-
6.....	9.51	9.20	9.14	9.17	9.80	10.04	10.01	-	8.35	-	7.78	-
7.....	9.49	9.21	8.96	9.13	9.80	10.04	-	-	8.35	-	7.77	-
8.....	9.50	9.21	8.97	9.21	9.81	10.05	-	-	8.34	-	7.76	-
9.....	9.49	9.19	9.05	9.51	9.81	10.05	-	-	8.34	-	7.75	-
10.....	9.49	9.19	9.14	9.41	9.81	10.06	-	-	8.30	-	7.74	7.74
11.....	9.50	9.17	9.15	9.51	9.82	10.06	-	-	8.28	-	7.88	7.74
12.....	9.49	9.11	9.14	9.36	9.82	10.07	-	8.81	8.24	-	7.70	7.65
13.....	9.49	9.12	9.14	9.41	9.83	10.09	-	8.76	8.24	-	7.70	7.85
14.....	9.47	9.10	9.15	9.47	9.83	10.11	-	8.66	8.23	-	7.67	7.85
15.....	9.45	9.11	9.16	9.56	9.84	10.11	-	8.76	8.22	-	7.65	7.54
16.....	9.49	9.11	9.14	9.57	9.84	10.12	-	8.68	8.21	-	7.64	7.46
17.....	9.47	9.09	9.12	9.58	9.85	10.13	9.30	8.66	8.20	-	7.60	7.54
18.....	9.51	9.11	9.14	9.60	9.87	10.14	-	8.64	8.16	-	7.68	7.62
19.....	9.51	9.10	9.10	9.59	9.87	10.14	-	8.54	8.12	-	7.56	7.53
20.....	9.53	9.08	8.93	9.58	9.88	10.14	-	8.54	8.12	-	7.55	7.50
21.....	9.51	9.07	9.09	9.58	9.88	10.14	-	8.66	8.14	-	7.55	7.51
22.....	9.51	9.05	9.15	9.59	9.90	10.14	-	8.56	8.13	7.87	7.54	7.51
23.....	9.49	9.01	9.12	9.59	9.90	10.15	-	8.54	8.04	7.87	7.54	7.54
24.....	9.41	9.00	9.13	9.59	9.96	10.15	-	8.40	8.06	7.86	-	7.56
25.....	9.37	-	9.17	9.60	9.96	10.15	-	8.28	8.05	7.85	-	7.61
26.....	9.35	-	9.11	9.66	9.97	10.11	-	8.20	8.05	7.83	-	7.50
27.....	9.29	-	9.08	9.72	9.98	10.11	-	8.32	8.04	-	-	7.56
28.....	9.30	-	9.13	9.79	10.00	10.00	-	8.43	8.04	-	-	7.56
29.....	9.31	-	9.15	9.78	-	10.00	-	8.46	8.02	-	-	7.42
30.....	9.29	-	9.11	9.79	-	10.00	-	8.50	-	-	-	7.39
31.....	9.27	-	9.17	9.79	-	10.11	-	8.55	-	-	-	7.39

Add 790.00 to obtain elevation in feet, Geodetic Survey of Canada datum, 1928 adjustment.

SASKATCHEWAN RIVER TRIBUTARY BASIN

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SASKATCHEWAN RIVER AT NIPAWIN - STATION No. 5KD₁

Location: Lat. 53° 22', long. 104° 02' in NW. 1/4 sec. 31, tp. 50, rge. 14, W. 2nd Mer., Saskatchewan, about sixty miles by river below confluence of North and South Saskatchewan rivers. Drainage Area: 101,300 square miles. Gauge: Wire-weight. Measurement of Discharge: From cableway. Period of Record: Continuous August 1945 to September 1948; part-year records 1951 to 1953; March to October, 1954 to date. Extremes Recorded: Daily - Maximum, 1 June 1948, 171,700 cfs, Minimum, 19 February 1947, 3,030 cfs. Revisions: 1948, W.R.P. 117. Remarks: Records fair. There are many power and irrigation developments in the basin above this station whose operation affect the discharge.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	4,590b	6,950	26,670	41,600	35,700	34,610	17,590	12,390	-	-
2.....	-	-	4,590	7,590	25,690	43,530	35,550	33,250	17,560e	12,210	-	-
3.....	-	-	4,650	8,770	24,830	44,580	34,970	30,480	17,530	11,680	-	-
4.....	-	-	4,710	9,840	23,260	45,070	34,110	28,980	17,090	11,380	-	-
5.....	-	-	4,870	12,060	21,780	44,580	34,970	29,660	17,040	10,530	-	-
6.....	-	-	4,590	12,200	20,830	43,530	48,620	28,640	17,910e	10,320	-	-
7.....	-	-	4,410	11,660	19,730	41,660	59,320	27,660	18,780	9,750	-	-
8.....	-	-	4,680	13,180	18,320	44,300	57,680	26,820	17,980	8,890	-	-
9.....	-	-	4,350	25,630	17,440	46,280	56,670	25,860	16,330	8,850e	-	-
10.....	-	-	4,260	32,570	16,740	45,140	55,190	25,290	14,430	8,810e	-	-
11.....	-	-	4,470	46,350	16,110	45,500	53,100	25,600	14,140	8,770	-	-
12.....	-	-	4,650	53,360b	16,320	45,430	50,480	25,600	13,840e	8,650	-	-
13.....	-	-	5,400	55,290	20,010	45,140	47,950	24,470	13,550	8,390	-	-
14.....	-	-	5,400	52,920	24,900	43,950	48,260	22,140	13,550e	8,200	-	-
15.....	-	-	5,660	52,330	26,920	44,100	48,640	21,960	13,550	8,050	-	-
16.....	-	-	5,910	56,640	27,350	45,680	47,420	20,880	12,620	8,010	-	-
17.....	-	-	5,970	56,420	25,380	45,150	42,830	20,230	12,100e	7,820	-	-
18.....	-	-	6,140	53,510	30,290	42,750	43,350	21,120	11,590	7,490	-	-
19.....	-	-	6,140	50,850	32,570	42,310	44,920	21,120	10,990	7,840e	-	-
20.....	-	-	5,910	50,410	35,690	43,580	44,250	20,530	11,200	8,200	-	-
21.....	-	-	6,000	48,080	38,680	45,750	42,830	19,530	12,340	8,540	-	-
22.....	-	-	6,100	44,790	38,940	45,600	41,720	19,300	13,460	8,620	-	-
23.....	-	-	5,780	46,070	39,760	42,900	37,740	19,060e	14,230	8,770	-	-
24.....	-	-	5,490	46,070	38,610	42,010	36,570	18,830	15,080	8,620e	-	-
25.....	-	-	5,440	42,630	31,040	41,120	37,810	18,600	15,860	8,460	-	-
26.....	-	-	5,400	38,480	34,900	40,090	38,180	18,090	15,390	8,500	-	-
27.....	-	-	5,520	35,270e	35,420	37,010	37,810	18,090	14,380	8,540	-	-
28.....	-	-	5,750	32,060	35,030	34,830	37,230	18,090	13,080	8,540	-	-
29.....	-	-	5,910	29,970	34,510	34,970	35,330	17,920	12,800e	9,910	-	-
30.....	-	-	6,100	27,850	34,180	42,160	34,040	17,870	12,530	9,950	-	-
31.....	-	-	6,520	-	35,620	-	33,750	17,700	-	9,510	-	-
Mean	-	-	5,334	35,330	27,980	43,010	43,130	23,160	14,620	9,167	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet in 1,000	-	-	328	2,102	1,721	2,559	2,652	1,424	869.8	563.7	-	-

The Period.....Discharge: Daily - Maximum 7 July, 59,320
(245 days) - Minimum 10 March, 4,260

Mean 25,150

Runoff: Acre-feet 12,220,000

b - Ice conditions 1 March to 12 April. e - Estimated.
Gauge heights from graph of observed readings 5 to 10 July.

SASKATCHEWAN RIVER AT THE PAS - STATION No. 5KJ₁

Location: Lat. 53° 49' 50", long. 101° 15' 20", in sec. 10, tp. 56, rge. 26, W. 1st Mer., Manitoba, at Canadian National Railways bridge. Drainage Area: 125,100 square miles. Gauge: Wire-weight; elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. Measurement of Discharge: From bridge. Period of Record: January 1913 to date. Average Discharge: (41 years) - 24,300 cfs. Extremes Recorded: Daily - Maximum, 19 July 1916, 859.51 feet, 11 June 1948, 105,500 cfs (elevation 859.28 feet); Minimum, 19 January 1942, 838.72 feet, February 1930, 1,790 cfs (elevation 839.21 feet). Remarks: Records good during open-water period; fair during ice period.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	17,600	11,900	13,300b	5,550	5,450	5,800	8,620	55,000	39,000e	41,300	42,400	21,800
2.....	17,300	12,000	13,000	5,550	5,450	5,800	9,200	54,400	38,900	41,300	41,300	21,200
3.....	17,100	11,200e	12,700	5,500	5,450	5,800	9,750	54,000	39,500	40,600	40,700	20,800
4.....	17,300	10,400	11,900	5,500	5,450	5,800	11,200	53,000e	39,200	40,400	40,000	19,700
5.....	16,100	10,700	11,200	5,450	5,450	5,800	12,600	52,000	41,200	40,800	38,800	19,300
6.....	15,000e	12,100	10,500	5,450	5,450	5,800	14,400	50,700	41,400	40,300e	38,600	18,700
7.....	13,800	11,500	10,000	5,450	5,500	5,800	16,100	49,400	41,900	39,800	38,400	18,400e
8.....	12,800e	14,600	8,900	5,450	5,500	5,900	17,700	47,900	41,900e	39,600	37,500	18,100
9.....	11,800e	10,300	7,800	5,400	5,500	5,950	19,500	46,400	41,900	39,400	37,200	18,400
10.....	10,800	10,300e	6,700	5,400	5,500	6,000	21,800	45,700	42,800	39,100	36,700e	18,600
11.....	11,600e	10,400	5,820	5,400	5,500	6,100	24,500	43,400	43,000	39,300	36,100	18,500
12.....	12,300e	14,800	5,600	5,400	5,500	6,200	28,200	42,900	43,300	39,300e	34,700	18,600
13.....	13,000e	16,200	5,380	5,350	5,500	6,300	35,900	41,200	43,100	39,200e	34,900	17,800
14.....	13,800e	15,700	5,300	5,350	5,550	6,400	44,400	39,400	43,200	39,100	32,300	19,600e
15.....	14,600	15,900e	5,300	5,350	5,550	6,500	48,100b	37,400	43,300e	42,500	33,200	21,500
16.....	14,400	16,100	5,450	5,340	5,600	6,700	53,000	36,400	43,400	42,800	32,300	21,100
17.....	14,300e	16,600e	5,510	5,330	5,600	6,920	52,000	36,000	43,000	42,800	31,300e	17,800
18.....	14,200e	17,100	5,600	5,350	5,600	7,120	50,400	36,500e	43,800	44,000	30,300e	15,400
19.....	14,100e	16,000	5,600	5,350	5,650	7,320	50,900	37,000	44,200	43,700	29,200	14,500
20.....	14,000e	16,000	5,780	5,350	5,650	7,480	51,500e	35,900	43,500	44,200e	28,600	14,100
21.....	14,000	15,700	5,820	5,350	5,700	7,520	52,000	35,700	43,500	44,700	27,800	13,100e
22.....	15,100	13,100	5,820	5,350	5,700	7,500	52,300	37,700	43,600e	43,600	27,300	12,100
23.....	12,300	13,000	5,820	5,400	5,750	7,700	53,200	38,200	43,800	43,000	26,200	14,100
24.....	11,300	13,000e	5,820	5,400	5,750	7,920	53,800	38,800	43,900	42,900	25,700e	14,100
25.....	9,800	13,000	5,820	5,400	5,780	8,020	54,300	39,000e	43,500	42,700	25,200	14,500
26.....	7,950	13,600	5,820	5,400	5,780	7,880	54,900	39,300	43,400	43,600e	25,100	15,000
27.....	9,700e	14,000	5,820	5,400	5,780	8,420	55,100e	39,900	42,800	44,500e	24,400	15,700
28.....	11,500	14,000	5,820	5,400	5,780	8,450	55,300	39,100	42,600	45,400	24,400	16,100e
29.....	10,100	13,400	5,780	5,400	-	8,450	55,200	39,300	42,700e	44,800	23,000	16,500
30.....	12,200	13,400	5,710	5,400	-	8,620	55,600	39,400	42,800	43,900	23,400	18,000
31.....	12,900	-	5,600	5,400	-	8,780	-	39,200	-	43,100	22,600e	-
Mean	13,300	13,500	7,260	5,410	5,590	6,930	37,400	42,600	42,500	42,000	31,900	17,400
Per sq. mi.	0.106	0.108	0.058	0.043	0.045	0.055	0.299	0.341	0.340	0.336	0.255	0.140
Acre-feet in 1,000	818.7	805.3	446.3	332.4	310.3	426	2,224	2,619	2,527	2,582	1,963	1,038

The Year.....Discharge: Daily - Maximum 30 April, 55,600 (elevation 852.68)
 - Minimum 14 December, 5,300
 Mean 22,200; Per Square Mile 0.178
 Runoff: Acre-feet 16,092,000; Depth in inches on drainage area 2.412

b - Ice conditions 1 December to 15 April.

e - Estimated.

Daily Elevations in Feet for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	44.67	42.80	44.68	42.40	42.13	42.18	43.58	52.57	-	49.88	50.11	45.78
2.....	44.58	42.83	44.51	42.42	-	-	43.81	52.45	49.40	49.88	49.88	45.65
3.....	44.53	-	44.21	42.42	42.33	42.08	43.96	52.36	49.52	49.74	-	45.56
4.....	44.58	42.17	44.08	42.35	42.38	42.09	44.47	-	49.45	49.71	49.63	45.31
5.....	44.22	42.30	44.12	-	42.43	42.08	44.91	51.98	49.86	49.78	49.37	45.23
6.....	-	42.87	-	42.15	42.48	42.11	-	51.73	49.91	-	49.33	45.08
7.....	43.47	42.63	-	42.07	42.49	42.15	45.97	51.49	50.00	49.59	49.29	-
8.....	-	43.75	-	42.02	42.47	42.17	47.10	51.20	-	49.54	49.10	44.95
9.....	-	42.13	-	41.94	-	-	47.59	50.90	50.00	49.49	49.04	45.03
10.....	42.34	-	-	41.89	42.45	42.28	48.21	50.76	50.17	49.44	-	45.06
11.....	-	42.16	42.50	41.85	42.48	42.33	48.91	50.30	50.21	49.47	48.82	45.04
12.....	-	43.80	42.35	-	42.49	42.36	49.68	50.20	50.28	-	48.53	45.07
13.....	-	44.26	42.34	41.87	42.49	42.42	-	49.85	50.24	-	48.57	44.89
14.....	-	44.09	42.34	41.73	42.46	42.47	52.29	49.50	50.25	49.44	48.02	-
15.....	43.75	-	-	41.79	42.44	42.49	52.19	49.08	-	50.12	48.20	45.72
16.....	43.67	44.24	42.40	41.71	-	-	52.17	48.87	50.30	50.17	48.02	45.62
17.....	-	-	41.90	41.68	42.35	42.68	51.98	48.79	50.21	50.18	-	44.87
18.....	-	44.53	41.32	41.70	42.30	42.76	51.67	-	50.38	50.41	-	44.27
19.....	-	44.19	41.52	-	42.25	42.86	51.77	49.00	50.47	50.36	47.37	43.99
20.....	-	44.20	41.69	41.63	42.20	42.94	-	48.78	50.32	-	47.24	43.87
21.....	43.52	44.10	41.88	41.64	42.15	42.97	51.98	48.72	50.32	50.56	47.09	-
22.....	43.90	43.23	-	41.61	42.08	43.07	52.08	49.14	-	50.34	46.97	43.25
23.....	42.97	43.20	42.00	41.62	-	-	52.21	49.24	50.39	50.21	46.73	43.87
24.....	42.57	-	42.05	41.60	41.97	43.17	52.32	49.38	50.40	50.20	-	43.89
25.....	41.91	43.19	-	41.55	41.99	43.23	52.43	-	50.32	50.16	46.53	44.00
26.....	41.07	43.39	42.17	-	41.98	43.19	52.54	49.47	50.30	-	46.49	44.14
27.....	-	43.53	42.25	41.69	41.99	43.44	-	49.60	50.17	-	46.35	44.34
28.....	42.64	43.54	42.30	41.79	42.08	43.48	52.61	49.44	50.15	50.69	46.35	-
29.....	42.07	43.34	-	41.88	-	43.49	52.59	49.48	-	50.57	46.04	44.56
30.....	42.90	43.32	42.35	41.98	-	-	52.68	49.51	50.17	50.40	46.13	44.92
31.....	43.17	-	42.38	42.05	-	43.64	-	49.46	-	50.24	-	-

Add 800.00 to obtain elevation in feet above Mean Sea Level, Geodetic Survey of Canada datum, 1928 adjustment.

SASKATCHEWAN RIVER AT HEAD OF GRAND RAPIDS - STATION No. 5KL₁

Location: Lat. 53° 09' 35", long. 99° 20' 45", Manitoba, approximately ten miles from Lake Winnipeg. Gauge: Recording; elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. Period of Record: September 1950 to date. Extremes Recorded: Daily - Maximum, 14 October 1954, 792.27 feet, Minimum, 15 April 1956, 785.40 feet. Remarks: Records supplied by Manitoba Water Resources Branch.

Daily Elevations in Feet for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	7.27	-	-	-	-	-	-	-	9.48	-	-	-
2.....	7.25	-	-	-	-	8.10	-	-	9.46	-	-	-
3.....	7.18	6.75	-	7.87	8.50	-	-	-	9.54	-	9.85	-
4.....	7.09	-	-	-	-	-	-	9.83	9.62	-	-	-
5.....	7.09	-	-	-	-	-	-	9.89	9.57	-	-	-
6.....	7.23	-	-	-	-	-	5.81	9.98	9.56	9.59	-	8.49
7.....	7.22	-	-	8.34	-	-	-	10.06	9.65	-	-	-
8.....	7.22	-	-	-	-	-	-	10.05	9.60	-	-	-
9.....	7.35	-	-	-	7.82	7.72	-	10.00	9.51	-	9.61	-
10.....	7.36	-	-	-	-	-	-	10.07	9.57	-	-	-
11.....	7.28	6.54	-	-	-	-	-	10.15	9.70	-	-	-
12.....	7.19	-	-	7.70	-	-	-	10.14	9.70	-	-	-
13.....	7.13	-	-	-	-	-	5.23	10.17	9.64	-	-	7.96
14.....	7.01	-	-	-	-	-	-	10.38	9.53	-	-	-
15.....	7.04	-	-	-	-	-	-	10.33	9.54	-	-	-
16.....	7.06	6.34	-	-	8.04	7.60	-	10.22	9.50	-	-	-
17.....	7.10	-	-	-	-	-	-	10.20	9.51	-	9.43	-
18.....	7.08	-	-	-	-	-	-	10.50	9.55	-	-	-
19.....	7.03	-	-	7.68	-	-	-	10.43	9.65	9.83	-	-
20.....	6.95	-	-	-	-	-	7.99	10.19	9.64	-	-	7.93
21.....	7.01	-	-	-	8.30	-	-	9.94	9.68	-	-	-
22.....	7.05	-	-	-	-	-	-	9.91	9.59	-	-	-
23.....	7.03	6.21	-	-	7.98	7.24	-	9.73	9.56	-	-	-
24.....	7.06	-	-	-	-	7.29	-	9.72	9.53	-	-	-
25.....	7.04	-	-	-	-	-	-	9.61	9.53	-	9.09	-
26.....	7.03	-	-	7.10	-	-	-	9.73	9.55	10.03	9.09	-
27.....	6.91	-	-	-	-	-	-	9.71	9.53	-	-	7.81
28.....	-	-	-	-	-	-	9.10	9.65	9.48	-	-	-
29.....	-	-	-	-	-	-	-	9.60	9.53	-	-	-
30.....	-	-	-	-	-	6.19	-	9.51	-	-	-	-
31.....	-	-	-	-	-	-	-	9.48	-	-	8.59	-

Add 780.00 to obtain elevation in feet, Geodetic Survey of Canada datum, 1928 adjustment.

Location: Lat. 53° 31', long. 103° 32', on northern boundary of NE. 1/4 sec. 22, tp. 52, rge. 11, W. 2nd Mer., Saskatchewan, about eight miles above confluence with Saskatchewan River and twenty-four miles northeast of Nipawin.
Drainage Area: 239 square miles. Gauge: Wire-weight. Measurement of Discharge: From bridge or by wading.
Period of Record: March to October, 1955 to date. Extremes Recorded: Daily - Maximum, 5 May 1956, 2,850 cfs. Minimum, Nil at various times; Instantaneous Maximum - 11 p.m., 5 May 1956, 4,280 cfs. Remarks: Records fair.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	Nil b	Nil	3.6	Nil	Nil	Nil	Nil	Nil	-	-
2.....	-	-	"	"	3.9	"	"	"	"	"	-	-
3.....	-	-	"	"	3.2	"	"	"	"	"	-	-
4.....	-	-	"	"	3.2	"	"	"	"	"	-	-
5.....	-	-	"	Nil	3.3e	"	"	"	"	"	-	-
6.....	-	-	"	251b	3.4	"	"	"	"	"	-	-
7.....	-	-	"	798	2.0	"	"	"	"	"	-	-
8.....	-	-	"	550	2.0	"	"	"	"	"	-	-
9.....	-	-	"	186	1.9	"	"	"	"	"	-	-
10.....	-	-	"	88	2.0e	"	"	"	"	"	-	-
11.....	-	-	"	69	2.0	"	"	"	"	"	-	-
12.....	-	-	"	59	2.2	"	"	"	"	"	-	-
13.....	-	-	"	54e	2.0e	"	"	"	"	"	-	-
14.....	-	-	"	48.6e	1.9	"	"	"	"	"	-	-
15.....	-	-	"	43.4	1.6e	"	"	"	"	"	-	-
16.....	-	-	"	44.8	1.3	"	"	"	"	"	-	-
17.....	-	-	"	46.6	1.1	"	"	"	"	"	-	-
18.....	-	-	"	46.3	0.9	"	"	"	"	"	-	-
19.....	-	-	"	48.1*	0.9e	"	"	"	"	"	-	-
20.....	-	-	"	59	0.9	"	"	"	"	"	-	-
21.....	-	-	"	56	0.8e	"	"	"	"	"	-	-
22.....	-	-	"	44.5	0.7	"	"	"	"	"	-	-
23.....	-	-	"	11.3	0.7e	"	"	"	"	"	-	-
24.....	-	-	"	21.3	0.7	"	"	"	"	"	-	-
25.....	-	-	"	10.0	Nil	"	"	"	"	"	-	-
26.....	-	-	"	7.4	"	"	"	"	"	"	-	-
27.....	-	-	"	4.5	"	"	"	"	"	"	-	-
28.....	-	-	"	20.7	"	"	"	"	"	"	-	-
29.....	-	-	"	18.8	"	"	"	"	"	"	-	-
30.....	-	-	"	5.0	"	"	"	"	"	"	-	-
31.....	-	-	"	-	"	-	"	"	-	"	-	-
Mean	-	-	Nil	86.4	1.49	Nil	Nil	Nil	Nil	Nil	-	-
Per sq. mi.	-	-	Nil	0.36	0.01	Nil	Nil	Nil	Nil	Nil	-	-
Acre-feet	-	-	Nil	5,140	92	Nil	Nil	Nil	Nil	Nil	-	-

The Period.....Discharge: Daily - Maximum 7 April, 798
 (245 days) - Minimum at various times, Nil
 Mean 10.8; Per Square Mile 0.05
 Runoff: Acre-feet 5,230; Depth in inches on drainage area 0.41

b - Ice conditions 1 March to 6 April. e - Estimated.
 Gauge heights from graph of observed readings 6 to 12 April.

Location: Lat. 53° 35', long. 104° 10', in SW. 1/4 sec. 21, tp. 53, rge. 15, W. 2nd Mer., Saskatchewan, seven miles north of Love and seven miles above confluence with Whitefox River. Drainage Area: 1,900 square miles. Gauge: Wire-weight. Measurement of Discharge: From bridge or by wading. Period of Record: Part-year records 1950 to 1952 and March to October, 1953 to date. Extremes Recorded: Daily - Maximum, 10 April 1955, 6,000 cfs (estimated), Minimum, 1 March to 12 April 1957, 0 cfs (estimated). Remarks: Records fair.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	b	602	925	406	88	59	53	90	-	-
2.....	-	-		641	852	435	100	56	56	92	-	-
3.....	-	-		577	838	441	92	54	56	85	-	-
4.....	-	-		713	838	447	96	53	54	83	-	-
5.....	-	-		896	824	424	114	50	54	90	-	-
6.....	-	-	50e	1,200	767	412	123	47.0	56	105	-	-
7.....	-	-		1,260b	747	406	138	42.7	48.5	103	-	-
8.....	-	-		1,210	740	384	138	41.4	49.2e	100	-	-
9.....	-	-		1,320	713	372	126	50	50	121	-	-
10.....	-	-		1,440	693	335	105	42.7	47.0	121	-	-
11.....	-	-		1,420	667	345	98	44.0	45.5	178	-	-
12.....	-	-	52	1,440	634	340	92	42.7	42.7	165	-	-
13.....	-	-	52	1,570	621	340	94	42.7	50	148	-	-
14.....	-	-	54	1,390	621	310	103	41.4	64	151	-	-
15.....	-	-	54	1,310	596	286	133	38.8	72	143	-	-
16.....	-	-	58	1,280	552	230	145	38.8	100	140	-	-
17.....	-	-	56	1,300	539	268	145	38.8	98	140	-	-
18.....	-	-	56	1,460	583	254	143	37.5	100	140	-	-
19.....	-	-	58	1,640	558	268	131	36.2	94	138	-	-
20.....	-	-	58	1,760	570	272	121	34.9	98	131	-	-
21.....	-	-	58	1,980	533	202	107	34.9	103	131	-	-
22.....	-	-	59	1,760	502	143	100	33.6	112	128	-	-
23.....	-	-	59	1,570	483	126	90	36.2	105	126	-	-
24.....	-	-	83	1,490	490	112	81	37.5	100	131	-	-
25.....	-	-	105	1,370	471	96	75	38.8	98	121	-	-
26.....	-	-	154	1,310	441	94	72	45.5	94	123	-	-
27.....	-	-	345	1,190	435	98	73	53	92	116	-	-
28.....	-	-	654	1,070	441	83	72	54	90	103	-	-
29.....	-	-	641	985	441	94	70	59	88e	107	-	-
30.....	-	-	577	932	424	77	68	61	85	121	-	-
31.....	-	-	496	-	400	-	63	54	-	138	-	-
Mean	-	-	138	1,270	611	270	103	45.1	75.2	123	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	8,490	75,540	37,560	16,070	6,340	2,780	4,470	7,560	-	-

The Period.....Discharge: Daily - Maximum 21 April, 1,980
 (245 days) - Minimum 22 August, 33.6
 Mean 327
 Runoff: Acre-feet 158,800

b - Ice conditions 1 March to 7 April. e - Estimated.
 Gauge heights from graph of observed readings 5 to 7 April.

CEDAR LAKE AT OLESON'S POINT - STATION No. 5KL₅

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Location: Lat. 53° 17' 00", long. 100° 19' 00", Manitoba, new outlet of Saskatchewan River into Cedar Lake. Gauge: Recording; elevations referred to Geodetic Survey of Canada datum, 1928 adjustment. Period of Record: August 1940 to date. Extremes Recorded: Daily - Maximum, 1 July 1948, 835.90 feet, Minimum, 7 March 1957, 829.58 feet. Remarks: Records supplied by Manitoba Water Resources Branch.

Daily Elevations in Feet for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	11.00	-	-	-	-	9.96	-	12.47	12.72	-	-	-
2.....	11.00	-	-	-	-	-	-	12.46	12.62	-	-	-
3.....	10.99	-	-	-	-	-	-	12.44	12.75	12.98	-	-
4.....	10.94	-	-	10.08	-	-	-	12.46	-	-	-	-
5.....	10.99	10.59	10.30	-	-	-	9.92	12.62	12.75	-	-	-
6.....	11.05	-	-	-	-	-	-	13.22	-	-	-	11.76
7.....	11.07	-	-	-	-	-	-	13.25	-	-	-	-
8.....	10.88	-	-	-	9.98	-	-	13.27	-	-	-	-
9.....	11.17	-	-	10.05	-	9.95	-	13.28	-	-	-	-
10.....	11.01	-	-	-	-	-	-	13.34	-	12.71	-	-
11.....	10.97	-	-	-	-	-	-	13.44	-	12.77	-	-
12.....	11.03	-	-	-	-	-	-	13.52	-	-	-	-
13.....	10.96	-	10.17	-	-	-	-	13.46	12.68	-	-	-
14.....	10.87	-	-	-	-	-	-	13.47	-	-	-	-
15.....	10.86	-	-	10.04	9.98	-	-	13.56	-	-	-	-
16.....	10.90	-	-	-	-	9.97	-	13.47	-	-	-	-
17.....	10.87	-	-	-	-	-	11.39	13.34	-	-	-	-
18.....	10.90	-	10.13	-	-	-	-	13.40	-	-	-	-
19.....	10.87	-	-	-	-	-	-	13.39	-	-	-	-
20.....	10.85	-	-	-	-	-	11.87	13.29	12.72	-	-	-
21.....	10.78	-	-	-	-	-	11.74	13.13	-	-	-	-
22.....	10.81	-	-	-	-	-	11.60	13.15	-	-	-	-
23.....	10.83	-	-	10.02	-	-	11.59	13.13	-	-	-	11.30
24.....	10.78	-	-	-	9.97	-	11.70	13.07	-	-	-	-
25.....	10.75	-	-	-	-	9.99	11.83	13.14	-	-	-	-
26.....	10.78	-	-	-	-	-	11.93	13.07	-	12.93	-	-
27.....	10.73	-	-	-	-	-	12.56	12.99	-	-	-	-
28.....	10.90	-	-	-	-	9.79	12.15	13.02	-	-	-	-
29.....	-	-	-	-	-	-	12.20	12.99	-	-	-	-
30.....	-	10.31	-	9.98	-	-	12.44	12.95	-	-	-	11.09
31.....	10.65	-	-	-	-	9.79	-	12.78	-	12.92	-	-

Add 820.00 to obtain elevation in feet, Geodetic Survey of Canada datum, 1928 adjustment.

NORTH SASKATCHEWAN RIVER AT SASKATCHEWAN CROSSING - STATION No. 5DA₆

Location: Lat. 51° 58' 00", long. 116° 43' 30", in NE. 1/4 sec. 35, tp. 34, rge. 20, W. 5th Mer., Alberta, one-half mile above Banff-Jasper highway crossing and immediately above confluence with Mistaya River. Drainage Area: 492 square miles (revised). Gauge: Recording. Measurement of Discharge: From cableway. Period of Record: Part-year records 1950 to date. Extremes Recorded: Daily - Maximum, 15 July 1953, 10,020 cfs, Minimum, 15 April 1958, 227 cfs (from discharge measurement); Instantaneous Maximum - 3 a.m., 15 July 1953, 11,130 cfs. Remarks: Records fair.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	-	300e	3,850	4,360	5,880	3,160	799	-	-
2.....	-	-	-	-	330e	3,780	4,400	5,520	2,450	788	-	-
3.....	-	-	-	-	361	3,530	4,320	5,620	2,010	858	-	-
4.....	-	-	-	-	394	3,470	4,530	4,320	1,760	787	-	-
5.....	-	-	-	-	440	3,810	4,620	3,420	1,780	787	-	-
6.....	-	-	-	-	519	4,150	4,460	4,140	1,830	781	-	-
7.....	-	-	-	-	646	4,510	4,190	6,040	2,200	758	-	-
8.....	-	-	-	-	894	4,510	4,680	5,280	2,500	764	-	-
9.....	-	-	-	-	1,060	5,000	4,720	5,360	2,870	764	-	-
10.....	-	-	-	-	1,080	5,380	4,960	5,530	3,070	753	-	-
11.....	-	-	-	-	1,100	4,940	5,520	5,520	3,060	747	-	-
12.....	-	-	-	-	1,130	3,750	4,380	5,410	3,080	787	-	-
13.....	-	-	-	-	1,040	3,690	4,640	5,240	3,340	888	-	-
14.....	-	-	-	-	1,020	4,150	3,850	5,170	2,420	811	-	-
15.....	-	-	-	-	1,170	4,150	3,720	5,260	1,830	961	-	-
16.....	-	-	-	-	1,460	3,730	4,750	5,400	1,620	828	-	-
17.....	-	-	-	-	1,570	3,790	5,270	5,890	2,040	676	-	-
18.....	-	-	-	-	1,550	4,240	5,700	5,710	1,700	620	-	-
19.....	-	-	-	-	1,700	4,240	5,740	5,580	1,490	656	-	-
20.....	-	-	-	-	2,110	3,920	6,080	5,250	1,310	539	-	-
21.....	-	-	-	-	2,980	4,070	6,280	5,480	1,220	467	-	-
22.....	-	-	-	-	3,510	4,600	7,120	5,440	1,170	440	-	-
23.....	-	-	-	-	4,240	5,370	6,070	5,140	1,110	418	-	-
24.....	-	-	-	-	4,370	5,530	5,400	5,360	998	372	-	-
25.....	-	-	-	-	4,640	5,890	5,590	5,880	955		-	-
26.....	-	-	-	-	4,920	6,480	4,950	6,340	846		-	-
27.....	-	-	-	-	4,580	6,570	5,310	4,980	805		-	-
28.....	-	-	-	-	4,640	6,910	5,580	3,640	858		-	-
29.....	-	-	-	-	4,970	5,620	5,490	3,220	949		-	-
30.....	-	-	-	-	5,020	4,520	5,850	2,830	864		-	-
31.....	-	-	-	-	4,210	-	6,460	2,790	-		-	-
Mean	-	-	-	-	2,192	4,605	5,129	5,053	1,843	629e	-	-
Per sq. mi.	-	-	-	-	4.46	9.36	10.42	10.27	3.75	1.28	-	-
Acre-feet	-	-	-	-	134,800	274,000	315,400	310,700	109,700	38,680	-	-

The Period.....Discharge: Daily - Maximum 22 July, 7,120
 (184 days) - Minimum 15 April, 227 (from discharge measurement)
 Instantaneous Maximum 11 p.m., 22 July, 7,260
 Mean 3,242; Per Square Mile 6.59
 Runoff: Acre-feet 1,183,000; Depth in inches on drainage area 45.09

e - Estimated.

Location: Lat. 52° 27' 10", long. 115° 45' 20", in SE 1/4 sec. 23, tp. 40, rge. 13, W. 5th Mer., Alberta, about one mile below mouth of Shunda Creek. Drainage Area: 1,980 square miles (revised). Gauge: Recording. Measurement of Discharge: From cableway. Period of Record: Continuous August 1915 to November 1921; periods of varying length 1922, 1923 and 1952 to date. Recorder established in 1952 at same location as former staff gauge. Average Discharge: (7 years) - 3,345 cfs. Extremes Recorded: Daily - Maximum, 20 June 1916, 24,478 cfs, Minimum, 9 March 1921, 235 cfs; Instantaneous Maximum - about 27 June 1915, 43,840 cfs. Remarks: Records good during open-water period and fair during ice period.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	b	1,320	10,350	13,280	10,140	5,190	1,940	-	-
2.....	-	-	-		1,520	10,100	12,570	9,340	5,800	1,840	-	-
3.....	-	-	-		1,530	9,410	11,640	8,950	4,580	1,780	-	-
4.....	-	-	-	700e	1,640	9,310	11,480	8,670	3,930	1,950	-	-
5.....	-	-	-		1,780	9,440	11,250	9,920	3,620	2,040	-	-
6.....	-	-	-		1,890	9,820	11,560	9,020	3,540	2,070	-	-
7.....	-	-	-		2,390	10,350	10,610	8,090	3,600	2,020	-	-
8.....	-	-	-		2,960	10,350	10,140	9,280	4,100	1,900	-	-
9.....	-	-	-	740	3,400	10,460	10,060	8,640	4,620	1,760	-	-
10.....	-	-	-	728	3,230	11,210	9,920	8,670	5,230	1,580	-	-
11.....	-	-	-	692	3,170	10,980	10,760	8,890	5,530	1,570	-	-
12.....	-	-	-	728	3,290	9,720	11,250	8,820	5,660	1,560	-	-
13.....	-	-	-	750b	3,000	8,180	11,440	8,640	6,580	1,680	-	-
14.....	-	-	-	1,130	2,850	8,300	8,760	8,420	6,610	1,940	-	-
15.....	-	-	-	1,040	3,070	8,860	7,550	8,330	4,850	1,900	-	-
16.....	-	-	-	964	3,680	8,360	8,060	8,360	4,000	2,010	-	-
17.....	-	-	-	880	4,040	8,000	9,610	8,600	3,740	1,880	-	-
18.....	-	-	-	832	4,000	8,510	9,890	9,080	4,000	1,760	-	-
19.....	-	-	-	814	4,260	9,280	10,240	8,790	3,530	1,710	-	-
20.....	-	-	-	814	5,050	9,110	10,240	8,540	3,260	1,700	-	-
21.....	-	-	-	814	7,130	8,510	10,570	8,270	2,980	1,570	-	-
22.....	-	-	-	802	8,510	8,670	11,330	8,480	2,800	1,500	-	-
23.....	-	-	-	790	9,750	9,510	12,490	8,330	2,600	1,440	-	-
24.....	-	-	-	820	10,350	10,210	10,460	8,030	2,410	1,370	-	-
25.....	-	-	-	742	10,680	10,500	9,750	8,390	2,230	1,280	-	-
26.....	-	-	-	730	11,170	11,800	9,280	9,050	2,120	1,240	-	-
27.....	-	-	-	720	10,830	12,370	8,820	9,410	2,020	1,230	-	-
28.....	-	-	-	725	10,570	16,760	9,380	7,310	1,950	1,220	-	-
29.....	-	-	-	766	11,290	16,980	9,380	6,210	1,960	1,190	-	-
30.....	-	-	-	952	12,200	14,720	9,210	5,660	1,990	1,170	-	-
31.....	-	-	-	-	11,330	-	9,650	5,070	-	1,140	-	-
Mean	-	-	-	786	5,545	10,340	10,340	8,432	3,834	1,643	-	-
Per sq. mi.	-	-	-	0.40	2.80	5.22	5.22	4.26	1.94	0.83	-	-
Acre-feet	-	-	-	46,760	340,900	615,100	636,000	518,500	228,200	101,000	-	-

The Period.....Discharge: Daily - Maximum 29 June, 16,980
 (214 days) - Minimum 11 April, 692
 Instantaneous Maximum 9 p.m., 28 June, 19,090
 Mean 5,858; Per Square Mile 2.96
 Runoff: Acre-feet 2,486,000; Depth in inches on drainage area 23.55

b - Ice conditions 1 to 13 April.

e - Estimated.

Location: Lat. 52° 23', long. 114° 56', in NE. 1/4 sec. 21, tp. 39, rge. 7, W. 5th Mer., Alberta, about one mile below confluence with Clearwater River. Drainage Area: 4,220 square miles (revised). Gauge: Recording. Measurement of Discharge: From cableway. Period of Record: Continuous June 1913 to July 1931 and March 1953 to date; March to October, 1944 to 1952. Station moved one-quarter mile downstream from railway bridge to new highway bridge on 1 March 1946. Recorder established on 13 May 1952 about two hundred and fifty feet upstream from highway bridge to replace former manual gauges. Average Discharge: (22 years) - 5,136 cfs. Extremes Recorded: Daily - Maximum, 27 June 1915, 129,700 cfs, Minimum, 10 January 1931, 427 cfs; Instantaneous Maximum - 27 June 1915 145,000 cfs (estimated). Revisions: 12 to 18 April 1916 discharges were corrected to 1,950, 2,200, 2,600, 3,200, 4,300, 3,200 and 2,600 cfs; mean discharge for April 1916 was corrected to 2,089 cfs; runoff for April 1916 and for the year 1916 were corrected to 124,304 and 443,374 acre-feet; mean discharge for October 1920 was corrected to 2,473 cfs; runoff for October 1920 and for water year 1920-21 were corrected to 152,059 and 2,949,643 acre-feet. Remarks: Records good during open-water periods and fair during ice period.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	4,110	2,760	1,230	1,160	938	1,100	1,850	2,800	15,120	22,620x	12,760	6,610
2.....	4,420	2,460	1,220	1,170	945	994	1,910	4,090	15,160	22,360x	12,050	7,240
3.....	5,550	2,240	1,130	1,180	1,110	1,030	1,980	4,450b	14,500	19,420	11,390	6,390
4.....	5,040	2,180	1,040	1,190	1,090	1,080	2,160	4,680	14,230	18,210	11,390	5,570
5.....	4,060	2,170	1,070x	1,200	1,100	1,050	2,580	5,110	14,270	16,850	9,840	4,950
6.....	3,660	2,270	1,080	1,350	1,070	1,080	3,000	5,230	14,230	17,290	8,540	4,720
7.....	3,420	2,270	1,100x	1,580	1,020	1,120	3,420	6,320	14,410	16,760	9,400	4,630
8.....	3,220	1,790b	1,040x	1,580	903	924	4,430x	7,470	14,500	15,300	11,350	4,950
9.....	3,070	1,510	1,490	1,600	868	959	4,800	8,380	14,370	14,750	10,820	5,540
10.....	2,960	1,590	1,320x	1,530	950	1,070	4,860	8,340	14,740	14,170	10,820	6,230
11.....	2,960	1,680	1,020	1,510	1,030	1,060	5,110	7,740	14,830	14,790	10,860	6,650
12.....	3,030	1,690	1,220	1,370	1,100	1,040	5,040	7,500	13,820	15,170	10,890	6,940
13.....	3,070	1,630		1,150	1,040	896	5,450	6,930	11,610	15,770	10,590	8,190
14.....	3,260	1,590		966	1,020	889	6,290	6,150	11,440	13,840	10,320	9,730
15.....	3,330	1,550		1,210	952	896	5,580	6,080	12,090	11,820	10,140	8,080
16.....	3,240	1,480	1,220e	1,340	882	903	5,010	6,750	11,660	11,780	10,140	6,610
17.....	3,070	1,350		1,470	938	917	4,060	7,390	10,970	13,280	10,210	5,850
18.....	2,940	1,170		1,380	1,020	938	3,360	7,230	11,400	13,320	10,740	5,920
19.....	2,800	1,180	1,210x	1,050	1,040	931	2,500	7,160	12,270	13,360	10,630	5,570
20.....	2,660	1,350	1,180	1,140	1,170	952	2,270	7,740	12,840	13,120	10,480	5,210
21.....	2,680	1,200	1,140	1,220	1,110	959	2,170	9,450	12,090	13,160	10,140	4,860
22.....	2,440b	1,260	1,110	1,240	1,170	973	2,070	11,530	12,000	13,760	10,440	4,510
23.....	2,070	1,510	1,020	1,190	1,260	1,050	2,020	12,880	12,130	14,790	10,290	4,290
24.....	1,810	1,600	1,080	1,150	1,330	1,070	1,740	13,730	13,010	13,640	9,910	4,020
25.....	2,150	1,620	1,140	1,130	1,160	1,140	1,590	14,140	13,190	12,400	9,990	3,810
26.....	2,540	1,550	1,200	1,040	1,190	1,130	1,560	14,640	13,540x	12,400	10,590	3,640
27.....	2,440	1,420	1,180	1,020	1,260	1,160	1,480	14,690	14,460x	11,740	11,270	3,470
28.....	2,270	1,240	1,150	1,090	1,310	1,200	1,440	14,370	21,380x	12,210	9,880	3,340
29.....	2,200b	1,160	1,130	1,110	-	1,340	1,500	14,460	25,220x	12,400	8,190	3,250
30.....	2,370	1,280	1,140	1,170	-	1,350	2,120	15,650	22,720x	12,130	7,570	3,220
31.....	2,620	-	1,150	1,140	-	1,500	-	16,090	-	12,170	6,840	-
Mean	3,079	1,658	1,165	1,246	1,071	1,055	3,112	9,005	14,270	14,670	10,270	5,466
Per sq. mi.	0.73	0.39	0.28	0.30	0.25	0.25	0.74	2.13	3.38	3.48	2.43	1.30
Acre-feet	189,300	98,680	71,620	76,610	59,460	64,860	185,200	553,700	849,300	902,000	631,700	325,300

The Year.....Discharge: Daily - Maximum 29 June, 25,220

- Minimum 9 February, 868

Mean 5,536; Per Square Mile 1.31

Runoff: Acre-feet 4,008,000; Depth in inches on drainage area 17.81

b - Ice conditions 22 to 29 October and 8 November to 3 May.

e - Estimated.

x - Manual gauge readings 19 December to 8 April and as indicated.

Location: Lat. 53° 32' 20", long. 113° 29' 10", Alberta, at the Low Level Bridge in river lot 17 in City of Edmonton.
 Drainage Area: 10,500 square miles. Gauge: Recording. Measurement of Discharge: From bridge. Period of Record: May 1911 to date. Records prior to October 1949 were obtained from manual gauge near present site with a few records collected from recording gauge in some years. Average Discharge: (47 years) - 7,777 cfs. Extremes Recorded: Daily - Maximum, 28 June 1915, 185,560 cfs, Minimum, 1 January 1940, 220 cfs (elevation 2,006.03); Instantaneous Maximum - at midnight 28 June 1915, 204,500 cfs. Revisions: July 1912 mean discharge was published in error in 1912 Report and should be 34,158 cfs; 1914, 1915 Report; drainage area, W.R.P. 97. Remarks: Records excellent during open-water periods and fair during ice period.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	6,340	4,960	1,900	1,290	1,310	1,640	1,560x	3,990	25,490	49,890	15,710	9,400
2.....	6,130	4,950	1,870	1,250	1,330	1,610	1,950	4,980	23,580	46,220	15,810	8,560
3.....	6,110	5,320	2,360	1,220x	1,450	1,570	2,390	7,560	24,380	44,740	16,100	8,250
4.....	6,640	4,840	2,780	1,230x	1,480	1,570	2,950	10,120	23,740	38,640	14,980	8,900
5.....	8,030	4,350	2,810	1,310	1,480	1,500	3,740	10,980	22,250	33,210	14,290	8,160
6.....	7,460	4,320	2,780	1,230	1,380	1,340	5,140	11,370	22,500	29,850	13,750	7,330
7.....	6,470	4,170	2,600	1,180	1,340	1,360	6,620	11,670	21,440	28,260	12,100	6,780
8.....	6,030	4,140	2,360	1,180	1,320	1,420	6,660	11,400	20,840	28,080	11,090	6,370
9.....	5,730	4,010	2,390	1,370	1,330	1,430	6,090	13,450	20,840	25,240	12,510	6,150
10.....	5,410	4,060	1,690	1,780	1,310	1,440	6,050	15,080	20,090	23,320	13,880	6,310
11.....	5,240	3,500	1,440	2,280	1,290	1,390	5,930	15,890	20,130	21,960	13,100	6,900
12.....	5,120	3,410	1,960	2,300	1,320	1,340	6,100	14,680	20,400	21,320	12,930	7,560
13.....	5,150	3,700	1,940	2,160	1,290	1,330	6,550	13,510	19,350	22,250	13,100	8,980
14.....	5,260	3,900	2,150	2,090	1,250	1,380	6,160	14,320	17,210	22,780	12,960	9,500
15.....	5,390	3,980	2,050	1,810	1,260	1,380	6,860	12,020	15,220	22,050	12,740	10,800
16.....	5,870	3,350	1,690	1,730	1,280	1,380	7,540	11,010	15,320	18,880	12,340	12,040
17.....	6,260	3,380	1,550	1,760	1,330	1,320	9,180b	11,060	15,990	16,940	12,100	9,880
18.....	6,110	2,600	1,650	1,600	1,330	1,260	8,640	12,150	14,980	17,620	12,070	8,370
19.....	5,750	2,320	1,440	1,420	1,280	1,240	7,960	11,940	14,350	19,200	12,120	7,560
20.....	5,480	2,190	1,320	1,370	1,240	1,240x	7,260	11,090	15,670	18,570	12,650	7,560
21.....	5,240	1,330	1,420	1,510	1,300	1,280x	6,150	11,090	17,130	18,380	12,460	7,060
22.....	5,020	1,610	1,360	1,560	1,360	1,220x	5,670	12,600	16,980	18,310	12,210	6,660
23.....	4,760b	2,530	1,430	1,570	1,400	1,230	5,650	16,460	15,810	18,420	11,860	6,240
24.....	4,240	2,560	1,590	1,490	1,480	1,240x	5,120	18,570	15,390	19,940	12,210	5,800
25.....	3,140	2,910	1,610	1,370	1,450	1,300x	4,680	20,400	16,210	21,520	11,880	5,590
26.....	2,770	3,400	1,570	1,480	1,510	1,270	4,250	20,020	16,610	18,120x	11,670	5,190
27.....	2,920	3,020	1,510	1,450	1,540	1,240x	3,920	20,330	16,830	17,110e	11,880	4,940
28.....	3,820	3,260	1,660	1,450	1,600	1,210x	3,740	20,290	19,660	16,100	12,510	4,860
29.....	5,330	3,190	1,480	1,400	-	1,280x	3,740	19,160	25,930	15,640	13,160	4,580
30.....	4,860	2,430	1,320x	1,360	-	1,500	3,780	19,000	49,740	16,460	11,690	4,360
31.....	4,840	-	1,300x	1,700	-	1,720x	-	20,480	-	16,140	10,180	-
Mean	5,385	3,456	1,838	1,545	1,366	1,375	5,401	13,760	20,140	24,040	12,840	7,355
Per sq. mi.	0.51	0.33	0.18	0.15	0.13	0.13	0.51	1.31	1.92	2.29	1.22	0.70
Acre-feet in 1,000	331.1	205.7	113.0	95.01	75.85	84.56	321.4	846.3	1,198	1,478	789.5	437.6

The Year..... Discharge: Daily - Maximum 1 July, 49,890
 - Minimum 7 and 8 January, 1,180
 Instantaneous Maximum 6 p.m., 30 June, 52,130
 Mean 8,255; Per Square Mile 0.79
 Runoff: Acre-feet 5,976,000; Depth in inches on drainage area 10.67

b - Ice conditions 23 October to 17 April.

e - Estimated.

x - Wire-weight gauge readings.

Location: Lat. 53° 35', long. 109° 38', in NW 1/4 sec. 16, tp. 53, rge. 25, W. 3rd Mer., Saskatchewan, about twenty miles downstream from Alberta-Saskatchewan boundary. Drainage Area: 22,000 square miles. Gauge: Measuring point. Measurement of Discharge: From cableway. Period of Record: Continuous July 1917 to November 1921 and March 1949 to date; part-year records in 1922 and 1944 to 1948. Records prior to 1944 published under the title "near Fort Pitt". Average Discharge: (13 years) - 8,221 cfs. Extremes Recorded: Daily - Maximum, 17 June 1944, 110,300 cfs, Minimum, 28 December 1949, 400 cfs; Instantaneous Maximum - 9:20 p.m., 17 June 1944, 123,200 cfs. Revisions: Drainage area, W.R.P. 40; December 1953 mean was published in error in W.R.P. 117 and should be 36,480 cfs; October 1922 unpublished data and June 1944 revised data can be obtained upon application to the District Engineer at Calgary, for address see page 8. Remarks: Records fair.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	5,640	4,960	3,050	1,780	1,420	1,360	2,600e	5,840	20,580	24,720	15,590	14,080
2.....	5,700	5,090	3,160	1,720	1,400	1,400		5,660	21,440	47,040	16,020	11,580
3.....	5,970	4,700	2,500	1,550	1,380	1,450		5,420	27,410	45,490	15,820	10,380
4.....	6,240	4,960	2,270	1,600	1,420	1,490		5,520	27,810	43,620	15,630	9,650
5.....	6,260	4,860	1,980	1,640	1,380	1,540		5,920	25,440	42,330	16,020	8,980e
6.....	5,910	4,800	1,960	1,530	1,460	1,580	9,200e	9,390	27,170	37,830	16,180	8,300
7.....	6,210	4,910	1,840	1,440	1,400	1,630		11,900	24,480	33,480	14,730	8,940
8.....	7,150	4,570	1,460	1,400	1,380	1,570		12,660	24,770	31,690	14,200	8,390
9.....	7,340	4,340	1,490	1,590	1,400	1,570		13,180	23,820	29,030	13,590	7,220
10.....	6,510	4,290	2,060	1,550	1,470	1,590		13,150	22,360	29,730	11,650	7,030
11.....	5,970	3,820	1,470	1,590	1,490	1,510	10,800	12,590	22,180	25,920	10,580	6,800e
12.....	5,670	3,820	1,570	1,610	1,400	1,510		15,740	21,670	24,430	9,000	6,580
13.....	5,400	3,820	1,800	1,590	1,310	1,340		18,700	21,120	22,880	13,260	7,110
14.....	4,990	3,580	1,900	1,510	1,340	1,340		9,970	17,400	21,220	13,110	7,600e
15.....	4,830	3,650	1,960	1,440	1,340	1,510		14,470b	13,860	21,440	12,890	8,100
16.....	4,700	3,230	2,020	2,240	1,360	1,550	12,300	13,290	19,790	23,490	13,110	9,990
17.....	4,780	3,580	1,510	2,120	1,380	1,530	13,000	15,860	16,780	22,830	12,740	10,020
18.....	4,910b	3,480	1,360	1,980	1,470	1,470	12,010	12,850	15,670	20,990	12,550	11,620
19.....	4,960	1,840	1,550	2,020	1,320	1,400	17,360	11,150	16,060	17,110	12,080	13,070
20.....	5,250	3,050	1,680	2,000	1,160	1,400	13,000	11,440	16,380	16,660	11,870	10,940e
21.....	5,350	1,740	1,860	1,840	1,110	1,460	11,260	12,630	15,390	18,490	12,010	8,810
22.....	5,250	2,080	1,860	1,810	1,180	1,400	11,110	12,010	14,850	19,090	12,520	7,960
23.....	5,090	2,710	1,630	1,780	1,250	1,400	10,060	11,700e	16,540	19,050	12,740	7,640
24.....	4,800	3,340	1,550	1,660	1,310	1,340	8,910	11,400	18,070	18,580	12,740	7,360
25.....	4,670	1,780	1,470	1,460	1,290	1,290	8,520e	15,510e	17,270	18,580	12,340	6,910
26.....	3,960	2,160	1,400	1,290	1,050	1,270	8,130	19,620	16,100	19,050	12,260	6,370
27.....	3,510	3,440	1,310	1,470	1,180	1,310	7,450	21,620	15,860	22,220	12,660	6,050
28.....	4,650	2,890	1,360	1,570	1,320	1,420	6,940	22,270	16,780	20,280	12,300	5,740
29.....	3,650	2,930	1,420	1,630	-	1,520	6,450	21,850	17,320	17,480	12,260	5,890
30.....	3,340	3,280	1,550	1,590	-	1,630	6,150	22,360	23,210	16,740	12,190	5,240
31.....	3,340	-	1,740	1,420	-	1,740	-	21,620	-	15,700	13,140e	-
Mean	5,226	3,590	1,798	1,659	1,335	1,468	8,403	13,680	20,300	25,440	13,150	8,478
Per sq. mi.	0.24	0.16	0.08	0.08	0.06	0.07	0.38	0.62	0.92	1.16	0.60	0.39
Acre-feet in 1,000	321.3	213.6	110.6	102.0	74.12	90.29	500.0	841.2	1,208	1,564	808.8	504.5

The Year..... Discharge: Daily - Maximum 2 July, 47,040
- Minimum 26 February, 1,050
Mean 8,756; Per Square Mile 0.40
Runoff: Acre-feet 6,338,000; Depth in inches on drainage area 5.40

b - Ice conditions 18 October to 15 April. e - Estimated.
Gauge heights from graph of observed readings 30 June to 6 July.

Location: Lat. 53° 12' 10", long. 105° 45' 40", Saskatchewan, in river lot 76 at Prince Albert. Drainage Area: 46,100 square miles. Gauge: Wire-weight. Measurement of Discharge: From bridge. Period of Record: Part-year records 1910 and 1911; continuous January 1912 to June 1944 and October 1944 to date. Average Discharge: (45 years) - 8,596 cfs. Extremes Recorded: Daily - Maximum, 2 July 1915, 186,546 cfs, Minimum, 23 January 1935, 395 cfs; Instantaneous Maximum - 1 p.m., 2 July 1915, 200,000 cfs. Revisions: Drainage area, 1917 Report; 1910 and 1911 records are published in 1913 Report; 1915, 1916 Report; 1912, 1914, 1916, 1917, 1918 and 1923, W. R. P. 117; April, August and September 1918 revised daily discharges can be obtained upon application to the District Engineer at Calgary, for address see page 8. Remarks: Records good during open-water periods and fair during ice period.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	7,030	4,250	2,600	1,120	1,560	1,360	1,260	10,930	21,110	15,460	19,790	11,880
2.....	6,470	4,250	2,090	1,120	1,480	1,430	1,580	10,010	21,200	16,140	17,590	11,830
3.....	6,160	4,540	2,300	1,100	1,420	1,430	1,830	9,690	21,650	16,740	16,370	11,790
4.....	5,910	4,860	2,010	1,040	1,400	1,470	1,980	9,300	21,300	17,350	15,910	12,090
5.....	5,520	5,080	1,920	1,070	1,480	1,510	2,160	8,720	20,570	26,520	15,460	12,590
6.....	5,400	4,660	2,150	1,080	1,510	1,420	2,320	8,230	20,220	44,420	16,050	12,850
7.....	5,600	4,700	2,200	1,250	1,480	1,450	2,580	7,930	22,400	44,790	15,730	11,220
8.....	5,830	4,700	2,090	1,400	1,430	1,400	3,460	7,610	25,760	41,430	15,230	9,970
9.....	6,020	4,910	2,260	1,420	1,400	1,420	4,910	7,440	24,800	37,250	15,500	9,380
10.....	6,020	4,400	2,180	1,430	1,430	1,420	9,090	7,750	25,490	33,780	15,230	8,870
11.....	6,180	4,010	1,900	1,430	1,370	1,370	17,400	10,450	24,180	31,120	15,100	8,300
12.....	7,100	3,760	2,380	1,400	1,420	1,360	14,140	12,300	23,560	29,680	14,330	8,570
13.....	7,320	3,330	2,130	1,340	1,320	1,320	20,020	13,320	23,050	29,230	13,850	8,230
14.....	7,490	3,160	2,240	1,250	1,340	1,370	21,550	14,020	22,200	28,840	12,890	7,970
15.....	7,190	3,520	2,200	1,320	1,370	1,340	21,200	13,980	21,550	26,980	11,710	7,860
16.....	7,190	3,720	2,220	1,310	1,390	1,430	21,300	14,420	21,250	24,280	11,630	6,740
17.....	6,100	3,480	1,830	1,310	1,340	1,400	20,910	15,910	20,570	22,350	13,280	6,620
18.....	5,800	3,040	1,790	1,280	1,360	1,300	19,730	18,150	21,060	21,400	13,410	6,860
19.....	5,650	2,300	1,560	1,310	1,420	1,250	21,350	17,300	20,760	21,750	12,930	7,050
20.....	5,520	3,060	1,620	1,310	1,430	1,260	19,250	16,050	19,590	22,250	12,850	6,980
21.....	5,520	3,270	1,790	1,280	1,360	1,220	16,190	15,590	18,250	22,300	12,850	8,680
22.....	5,400	2,680	1,900	1,310	1,340	1,190	15,320	14,780	16,050	20,270	12,680	10,010
23.....	4,910b	2,130	1,680	1,280	1,400	1,240	16,240	13,360	16,050	18,060	12,460	11,340
24.....	4,160	1,960	1,560	1,250	1,420	1,190	16,650	12,460	16,190	17,300	12,090	11,460
25.....	4,090	2,720	1,580	1,280	1,430	1,220	15,040	12,850	15,860	18,200	12,040	11,630
26.....	3,980	2,810	1,560	1,310	1,500	1,160	13,780	13,320	14,960	18,630	12,000	11,630
27.....	3,440	3,310	1,620	1,370	1,530	1,100	13,240	12,930	15,680	18,730	12,090	9,070
28.....	3,100	3,500	1,510	1,390	1,340	1,010	12,140	12,380	16,600	18,350	11,960	7,050
29.....	3,120	3,520	1,480	1,510	-	1,060	11,790	12,510	16,840	18,250	12,040	7,580
30.....	3,590	3,520	1,300	1,580	-	1,060	10,720b	15,280	16,140	18,730	12,170	7,080
31.....	3,920	-	1,200	1,580	-	1,140	-	18,540	-	20,220	11,880	-
Mean	5,507	3,638	1,898	1,304	1,417	1,300	12,300	12,500	20,160	24,540	13,840	9,473
Per sq. mi.	0.12	0.08	0.04	0.03	0.03	0.03	0.27	0.27	0.44	0.53	0.30	0.21
Acre-feet in 1,000	338.6	216.5	116.7	80.19	78.68	79.93	732.2	768.6	1,200	1,509	851.1	563.7

The Year..... Discharge: Daily - Maximum 7 July, 44,790

- Minimum 28 March, 1,010

Mean 9,027; Per Square Mile 0.20

Runoff: Acre-feet 6,535,000; Depth in inches on drainage area 2.66

b - Ice conditions 23 October to 30 April.

Gauge heights from graph of observed readings 4 to 11 July.

Location: Lat. 51° 53' 00", long. 116° 41' 20", in SW. 1/4 sec. 6, tp. 34, rge. 19, W. 5th Mer., Alberta, about three miles below lower end of Lower Waterfowl Lake, opposite Mile 79.3 on Banff-Jasper Highway and about seven miles above confluence with North Saskatchewan River. Drainage Area: 94 square miles. Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: Part-year records 1950 to date. Extremes Recorded: Daily - Maximum, 15 July 1953, 2,070 cfs, Minimum, 16 April 1957, 20 cfs; Instantaneous Maximum - 5 a.m., 15 July 1953, 2,310 cfs. Remarks: Records good.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	-	-	655	727	870	464	-	-	-
2.....	-	-	-	-	-	651	713	823	442	-	-	-
3.....	-	-	-	-	-	612	690	823	370	-	-	-
4.....	-	-	-	-	-	591	664	736	315	-	-	-
5.....	-	-	-	-	-	599	651	591	282	-	-	-
6.....	-	-	-	-	102x	638	690	587	262	-	-	-
7.....	-	-	-	-	-	681	664	813	265	-	-	-
8.....	-	-	-	-	-	690	664	838	312	-	-	-
9.....	-	-	-	-	-	740	659	843	363	-	-	-
10.....	-	-	-	-	-	808	677	818	414	-	-	-
11.....	-	-	-	-	-	798	736	838	464	-	-	-
12.....	-	-	-	-	-	713	870	813	518	-	-	-
13.....	-	-	-	-	-	655	870	779	608	165	-	-
14.....	-	-	-	-	-	659	659	759	538	174	-	-
15.....	-	-	-	35b	-	659	550	755	424	184	-	-
16.....	-	-	-	-	-	608	595	755	350	174	-	-
17.....	-	-	-	-	191	591	695	788	334	160	-	-
18.....	-	-	-	-	191	599	764	803	321	165	-	-
19.....	-	-	-	-	204	616	813	774	303	154	-	-
20.....	-	-	-	-	256	599	864	745	271	-	-	-
21.....	-	-	-	-	360	599	907	731	251	-	-	-
22.....	-	-	-	-	410	621	1,010	736	232	-	-	-
23.....	-	-	-	-	514	690	946	681	206	-	-	-
24.....	-	-	-	-	562	740	793	659	184	-	-	-
25.....	-	-	-	-	621	783	779	713	170	-	-	-
26.....	-	-	-	-	677	880	727	793	156	-	-	-
27.....	-	-	-	-	655	958	740	750	-	-	-	-
28.....	-	-	-	-	668	1,200	779	595	150e	-	-	-
29.....	-	-	-	-	699	1,010	779	514	-	-	-	-
30.....	-	-	-	-	727	813	788	449	-	-	-	-
31.....	-	-	-	-	695	-	891	414	-	-	-	-
Mean	-	-	-	-	-	715	753	729	314	-	-	-
Per sq. mi.	-	-	-	-	-	7.61	8.01	7.76	3.34	-	-	-
Acre-feet	-	-	-	-	-	42,560	46,320	44,800	18,680	-	-	-

The Period.....Discharge: Daily - Maximum 28 June, 1,200

(122 days)

- Minimum 15 April, 35

Instantaneous Maximum 4 p.m., 28 June, 1,280

Mean 630; Per Square Mile 6.70

Runoff: Acre-feet 152,400; Depth in inches on drainage area 30.39

b - Ice conditions.

e - Estimated.

x - Manual gauge reading.

Location: Lat. 52° 20' 40", long. 114° 56' 10", in NE. 1/4 sec. 9, tp. 39, rge. 7, W. 5th Mer., Alberta, about one and one-half miles above confluence with North Saskatchewan River. Drainage Area: 1,210 square miles. Gauge: Recording. Measurement of Discharge: From cableway. Period of Record: Continuous January 1914 to May 1931 and March 1953 to date; March to October, 1944 to 1952; records prior to 1944 collected about one-half mile downstream. Recorder established in May 1952 to replace former manual gauges. Average Discharge: (21 years) - 965 cfs. Extremes Recorded: Daily - Maximum, 27 June 1915, 39,100 cfs, Minimum, 22 December 1921, 70 cfs. Revisions: Drainage area, 1916 Report and W.R.P. 101; April 1921 mean discharge has been corrected to 611 cfs; runoff for April 1921 and for the water year 1920-21 have been corrected to 36,357 and 410,519 acre-feet; September 1922 mean discharge was published in error in W.R.P. 40 and should be 769 cfs; May 1944, W.R.P. 117. Remarks: Records fair.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	679	679	403	348	189	351	380	910	1,740	2,840	1,360e	768
2.....	688	635	405	364	186	317	439	1,370	1,760	3,470	1,320e	750
3.....	732	601	408	380	185	297	409	1,480	1,820	3,440	1,290e	750e
4.....	830	592	410	396	184	304	373	1,360	1,790	3,100	1,250	750
5.....	803	592	412x	412	183	373	373	1,420	1,730	2,730	1,200	734
6.....	741	601	419	430	182	351	358	1,440	1,660	2,750	1,100	702e
7.....	741	601	425	450	180	222	380	1,500	1,610	2,840	1,040	670
8.....	714	592	432	468	178	240	401	1,620	1,610	2,520	1,090e	654
9.....	723	732	404	453	177	337	387	1,680	1,590	2,270	1,140	638
10.....	723	750	376	444	168	380	337	1,630	1,610	2,110	1,130	654
11.....	732	567	348	434	159	401	380	1,490	1,630	2,150e	1,090	670
12.....	759	550	360	425	156	394	493	1,420	1,570	2,190e	1,070e	742
13.....	785	542	360	407	154	310	610	1,360	1,450	2,230x	1,040e	822e
14.....	812	550	360	390	153	216	830	1,200	1,360	2,130	1,020	901e
15.....	839	542	360	372	151	246	688	1,100	1,410	2,060	988e	980e
16.....	849	567	373	354	150	252	759b	1,090	1,400	1,790	957	1,060
17.....	848	570b	386	306	150	234	814	1,150	1,350	1,940	948	977e
18.....	812	715	399	258	150	252	715	1,130	1,380	1,820	948	894
19.....	812	644	412	210	160	290	654	1,060	1,460	1,800e	957	885
20.....	803	416	394	219	348	310	662	1,060	1,580	1,780e	952e	844e
21.....	803	351	377	228	370	337	654	1,150	1,630	1,770e	948	804
22.....	790b	416	360	236	391	337	614	1,450	1,530	1,750e	1,000	768
23.....	714	351	358	245	412	323	566	1,510	1,460	1,730	983e	744e
24.....	772	344	355	228	406	337	526	1,590	1,410	1,600e	965e	719e
25.....	768	394	352	212	399	380	503	1,540	1,380	1,480	948	694e
26.....	750	344	350	195	392	409	475	1,540	1,380	1,440e	894	670
27.....	653	387	348	195	386x	431	461	1,530	1,400	1,400	1,010	662e
28.....	628b	424	348	195	373	447	454	1,440	1,790	1,510	984	654
29.....	584	409	348	195	-	454	454	1,410	2,790	1,540	867	642e
30.....	592	401	348	195	-	439	518	1,590	2,780	1,480	844e	630x
31.....	644	-	348	192	-	394	-	1,750	-	1,400	822	-
Mean	746	529	379	317	238	334	522	1,386	1,635	2,099	1,037	761e
Per sq. mi.	0.62	0.44	0.31	0.26	0.20	0.28	0.43	1.15	1.35	1.73	0.86	0.63
Acre-feet	45,860	31,460	23,280	19,510	13,230	20,560	31,080	85,230	97,310	129,000	63,780	45,290

The Year.....Discharge: Daily - Maximum 2 July, 3,470
 - Minimum 16 to 18 February, 150
 Instantaneous Maximum 11 p.m., 2 July, 3,660
 Mean 837; Per Square Mile 0.69
 Runoff: Acre-feet 605,600; Depth in inches on drainage area 9.38

b - Ice conditions 22 to 28 October and 17 November to 16 April.

e - Estimated.

x - Wire-weight gauge readings 5 December to 27 February and 13 July to 30 September.

Location: Lat. 52° 58' 30", long. 115° 35' 20", in SW. 1/4 sec. 19, tp. 46, rge. 11, W. 5th Mer., Alberta, about twenty miles southwest of Lodgepole and about twelve miles northwest of mouth of Nordegg River. Drainage Area: 2,118 square miles (revised). Gauge: Recording. Measurement of Discharge: From cableway. Period of Record: April to November 1957 and April 1958 to date; miscellaneous measurements during periods December 1956 to March 1957 and January to March 1958. Extremes Recorded: Daily - Maximum, 29 June 1958, 17,760 cfs, Minimum, 6 February 1957, 256 cfs; Instantaneous Maximum - 5 a.m., 29 June 1958, 19,210 cfs. Remarks: Data supplied by Calgary Power Ltd.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	1,390e	1,400	-	-	-	-	-	1,820	7,880	14,300	3,170	1,760
2.....	1,440e	1,240	-	-	397b	-	-	2,750	9,660	13,230	3,070	1,800
3.....	1,680	1,150	-	-	-	-	-	3,580e	7,930	10,510	2,890	1,810
4.....	1,670	1,180	-	-	-	-	-	3,950e	7,900	9,090	2,790	1,720
5.....	1,530e	1,140	-	-	-	-	-	4,360	7,560	7,950	2,620	1,610
6.....	1,500	1,220	-	-	-	-	-	3,900	6,770	7,900	2,390	1,530
7.....	1,450	1,200	-	-	-	-	-	4,970	6,390	6,970	2,370	1,470
8.....	1,370	1,140e	-	519b	-	-	-	6,160	6,080	6,080	2,560	1,400
9.....	1,300	1,090e	-	-	-	-	-	6,850	5,850	5,490	2,460	1,380
10.....	1,290e	1,020	-	-	-	-	-	6,350	5,760	5,170	2,390	1,390
11.....	1,330	1,130	-	-	-	-	-	5,760	5,240	5,260	2,380	1,440
12.....	1,400	1,100	-	-	-	-	-	5,850	4,760	5,260	2,430	1,450
13.....	1,460	1,060	-	-	-	-	-	5,420	4,050	5,130	2,440	1,810
14.....	1,650	970	-	-	-	-	-	4,340	3,890	4,790	2,340	2,710
15.....	1,790	1,000	-	-	-	348b	-	4,360	4,130	4,230	2,260	2,240
16.....	1,700	930	-	-	-	-	-	4,920	3,890	4,030	2,220	1,920
17.....	1,570	900e	-	-	-	-	-	4,870	3,610	4,310	2,190	1,760
18.....	1,480		-	-	-	-	-	4,040	3,770	4,140	2,200	1,640
19.....	1,390		-	-	-	-	-	3,820	4,440	3,910	2,210	1,560
20.....	1,310		-	-	-	-	1,330	4,360	4,560	3,720	2,170	1,500
21.....	1,330	870e	-	-	-	-	1,330	5,620	4,050	3,620	2,110	1,440
22.....	1,300e		-	-	-	-	1,210	6,170	3,840	3,810	2,140	1,390
23.....			-	-	-	-	1,100	6,670	3,800	4,590	2,140	1,330
24.....			-	-	-	-	966	6,620	3,780	4,200	2,050	1,260
25.....	1,300e	-	-	-	417b	-	888	6,220	3,680	3,680	2,040	1,220
26.....	850e	-	-	-	-	380b	894	6,040	3,870	3,580	2,100	1,190
27.....		-	-	-	-	888	5,560	4,220	3,480	2,310	1,150	
28.....		-	-	-	-	-	912	5,260	10,190	3,500	2,310	1,150
29.....		-	-	-	-	-	1,020	5,400	17,760	3,520	2,140	1,140
30.....	1,260	-	-	-	-	-	1,320	7,640	16,300	3,290	1,980	1,130
31.....	1,440	-	-	-	-	-	-	9,630	-	3,170	1,860	-
Mean	1,424	1,006e	-	-	-	-	-	5,266	6,187	5,545	2,346	1,543
Per sq. mi.	0.67	0.47	-	-	-	-	-	2.49	2.92	2.62	1.11	0.73
Acre-feet	87,530	59,840	-	-	-	-	-	323,820	368,150	340,980	144,260	91,840

The Period.....Discharge: Daily - Maximum 29 June, 17,760

(214 days)

Instantaneous Maximum 5 a.m., 29 June, 19,210

Mean 3,337; Per Square Mile 1.58

Runoff: Acre-feet 1,416,420; Depth in inches on drainage area 12.54

b - Ice conditions.

e - Estimated.

Location: Lat. 53° 47' 15", long. 113° 13' 20", in NW. 1/4 sec. 28, tp. 55, rge. 22, W. 4th Mer., Alberta, two miles above confluence with North Saskatchewan River and about eighteen miles northeast of Edmonton. Drainage Area: 1,310 square miles. Gauge: Wire-weight. Measurement of Discharge: From bridge or by wading. Period of Record: Continuous January 1914 to May 1923; periods of varying length 1927 to 1931; mainly March to October, 1935 to date; miscellaneous measurements in 1913. Average Discharge: (11 years) - 114 cfs. Extremes Recorded: Daily - Maximum, 7 May 1948, 3,170 cfs, Minimum, Nil at various times. Revisions: Drainage area, 1916 Report, W.R.P. 40 and W.R.P. 101; May 1914 mean discharge has been corrected to 131 cfs; runoff for May 1914 and for the year 1914 have been corrected to 8,055 and 85,855 acre-feet; May 1917 mean discharge has been corrected to 593 cfs; runoff for May 1917 and for the water year 1916-17 have been corrected to 36,462 and 131,881 acre-feet; in W.R.P. 68, mean discharge for May 1931 should be shown as for the first to the thirtieth only; 1920, 1936 and 1940, W.R.P. 117; June and August 1943 mean discharges have been corrected to 131 and 71 cfs. Remarks: Records fair.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	12b	195	423	47.1	27.1	3.8	9.4	13.1	-	-
2.....	-	-	18	282	401	49.7	21.6	3.8	7.8	10.3	-	-
3.....	-	-	17	260	384	49.7	15.1	7.0	9.4	19.4	-	-
4.....	-	-	19	430	366	48.4	21.6	6.3	10.3	22.7	-	-
5.....	-	-	19	706	345	44.5	19.4	5.0	8.6	19.4	-	-
6.....	-	-	16	1,240	322	43.2	17.2	5.0	3.8	22.7	-	-
7.....	-	-	11	1,490b	312	44.5	14.1	6.3	5.0	23.8	-	-
8.....	-	-	16	900	273	41.9	12.1	3.8	5.0	27.1	-	-
9.....	-	-	18	789	258	45.8	13.1	6.3	6.3	27.1	-	-
10.....	-	-	19	770	234	36.7	13.1	3.8	3.8	29.4	-	-
11.....	-	-	19	822	220	35.4	12.1	3.3	2.4	24.9	-	-
12.....	-	-	20	822	200	33.0	15.1	3.3	1.5	20.5	-	-
13.....	-	-	18	876	200	30.6	22.7	2.4	10.3	24.9	-	-
14.....	-	-	18	856	198	31.8	16.1	2.0	18.3	20.5	-	-
15.....	-	-	17	861	181	31.8	15.1	2.0	7.0	22.7	-	-
16.....	-	-	19	856	166	31.8	14.1	1.7	15.1	17.2	-	-
17.....	-	-	17	846	150	29.4	12.1	2.4	9.4	11.2	-	-
18.....	-	-	14	752	142	29.4	11.2	1.7	6.3	9.4	-	-
19.....	-	-	17	784	120	30.6	12.1	5.0	7.0	18.3	-	-
20.....	-	-	20	756	104	27.1	9.4	3.8	6.3	12.1	-	-
21.....	-	-	20	710	94	27.1	9.4	5.0	3.8	8.6	-	-
22.....	-	-	19	674	84	28.2	12.1	7.0	5.6	6.3	-	-
23.....	-	-	22	644	65	24.9	9.4	9.4	6.3	7.0	-	-
24.....	-	-	23	610	80	23.8	7.0	9.4	5.6	8.6	-	-
25.....	-	-	22	577	80	21.6	8.6	7.0	7.0	7.0	-	-
26.....	-	-	21	556	68	20.5	7.0	11.2	7.8	6.3	-	-
27.....	-	-	22	528	68	22.7	6.3	6.3	7.8	6.3	-	-
28.....	-	-	24	505	59	26.0	3.8	8.6	10.3	4.4	-	-
29.....	-	-	30	475	58	22.7	5.0	8.6	34.2	5.6	-	-
30.....	-	-	44	452	51	20.5	5.0	7.8	2.4	4.4	-	-
31.....	-	-	204	-	45.8	-	4.4	7.0	-	4.4	-	-
Mean	-	-	25.6	701	186	33.3	12.7	5.35	8.13	15.0	-	-
Per sq. mi.	-	-	0.020	0.535	0.142	0.025	0.010	0.004	0.006	0.011	-	-
Acre-feet	-	-	1,580	41,700	11,410	1,980	778	329	484	924	-	-

The Period.....Discharge: Daily - Maximum 7 April, 1,490
 (245 days) - Minimum 12 September, 1.5
 Mean 122; Per Square Mile 0.093
 Runoff: Acre-feet 59,180; Depth in inches on drainage area 0.85

b - Ice conditions 1 March to 7 April.

VERMILION RIVER NEAR MANNVILLE - STATION No. 5EE₁

Location: Lat. 53° 22' 30", long. 111° 10' 30", in SW. 1/4 sec. 6, tp. 51, rge. 8, W. 4th Mer., Alberta, two and one-quarter miles north of Mannville and about fourteen miles upstream from reservoir at Vermilion. Drainage Area: 2,200 square miles. Gauge: Tape-weight. Measurement of Discharge: From bridge or by wading. Period of Record: September 1958. Remarks: Records fair. Records are available upon application to the District Engineer at Calgary, for address see page 8.

BATTLE RIVER NEAR UNWIN - STATION No. 5FE₁

Location: Lat. 52° 57', long. 109° 53', in NE. 1/4 sec. 5, tp. 46, rge. 27, W. 3rd Mer., Saskatchewan, about ten miles downstream from Alberta-Saskatchewan boundary. Drainage Area: 9,820 square miles. Gauge: Wire-weight. Measurement of Discharge: From bridge or by wading. Period of Record: March to October, 1944 to 1948; continuous March 1949 to date. Records for period 20 April 1945 to 27 May 1958 were obtained about one-half mile downstream in NW. 1/4 sec. 4. Average Discharge: (9 years) - 401 cfs. Extremes Recorded: Daily - Maximum, 7 and 8 May 1948, 9,970 cfs, Minimum, 1 and 2 March 1947, 7 cfs. Revisions: April and May 1945 mean discharges were published in error in W.R.P. 97 and should be 379 and 238 cfs. Remarks: Records fair.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	69	98	72	32	37	31	123	1,250	290	117	54	35.3
2.....	71	101	69	32	38	30	210	1,190	289e	108e	49.3	35.3
3.....	67	104	66	32	39	29	320	1,080	288	100	47.2	34.3
4.....	70	121	63	27	35	28	706	1,070	285	98	46.5e	33.3e
5.....	85	104	61	27	31	28	978	971	274	96	45.8	32.3
6.....	74	88	64	27	34	26	922	950	262e	92e	44.4	31.6e
7.....	67	84	64	26	35	24	725	855	251	87	43.7	30.8
8.....	67	114	63	24	36	22	1,070	844	239	89	45.8	33.8
9.....	74e	98	62	22	37	20	2,400	785e	234	89	42.5	33.0e
10.....	81	91	62	24	38	19	2,340b	725	228e	86e	42.5	32.3
11.....	81	84	62	27	39	18	3,470	703	222	83	43.1	33.3
12.....	86	79	60	30	41	15	3,240	677e	210	82	44.1e	34.8
13.....	89	82	58	32	43	14	3,040	651	210	80e	45.1	35.8
14.....	93	84	56	34	42	12	2,810	590	201	78e	41.9	38.3
15.....	94e	80	56	34	28	11	2,460	559	200e	76	41.3	37.8
16.....	95	78	54	35	42	11	2,020	522	199	74	40.7	37.6e
17.....	92	75	51	33	39	11	2,040	528	188	71	39.8e	37.3
18.....	89	76	48	33	41	10	1,980	462	174	70	38.9	39.0e
19.....	87e	74	45	32	43	10	1,880e	464	170	67	36.8	40.7
20.....	84e	71	42	30	45	10	1,790	454	164e	66e	36.8	38.3
21.....	82	72	40	30	45	12	1,760	441	157	64	42.4e	36.6e
22.....	78e	73	39	30	42	12	1,750	402	152e	62	47.9	35.0e
23.....	74b	76	37	30	39	11	1,720	385	148	61	37.3	33.3
24.....	73	75	40	30	37	11	1,710e	375	139	60	36.0e	32.8
25.....	76	73	43	30	37	11	1,710e	366	136	62e	34.8	33.0e
26.....	78	76	39	31	35	12	1,700	343	130e	65	35.8	33.1e
27.....	79	78	37	32	33	12	1,570	324	123e	62e	36.3	33.3
28.....	81	79	33	33	32	12	1,500	308	117	58	36.3	58
29.....	101	80	37	34	-	19	1,420e	300	114	56e	35.8	59
30.....	108	74	35	35	-	16	1,340e	298e	113	54	35.3	60
31.....	99	-	33	36	-	36	-	295	-	51	35.3e	-
Mean	82.1	84.7	51.3	30.5	38.0	17.5	1,690	618	197	76.3	41.4	37.3
Per sq. mi.	0.008	0.009	0.005	0.003	0.004	0.002	0.172	0.063	0.020	0.008	0.004	0.004
Acre-feet	5,050	5,040	3,160	1,870	2,110	1,080	100,600	38,020	11,720	4,690	2,550	2,220

The Year.....Discharge: Daily - Maximum 11 April, 3,470
- Minimum 18 to 20 March, 10

Mean 246: Per Square Mile 0.025

Runoff: Acre-feet 178,100; Depth in inches on drainage area 0.34

b - Ice conditions 23 October to 10 April.

e - Estimated.

Before 1 May records were collected from a wire-weight gauge at the railway bridge. From 1 to 27 May records were collected from a staff gauge about 300 feet downstream from the railway bridge. After 27 May records were collected from a wire-weight gauge located upstream from the railway bridge at the highway bridge.

Location: Lat. 53° 35', long. 106° 03', in SW. 1/4 sec. 23, tp. 53, rge. 1, W. 3rd Mer., Saskatchewan, in Prince Albert National Park, at Highway No. 2 crossing, two and two-tenths miles inside Park gate and eight miles downstream from Anglin Lake. Drainage Area: 218 square miles at present site, 156 square miles at former site. Gauge: Wire-weight. Measurement of Discharge: From bridge or by wading. Period of Record: Part-year records, 1946 to 1950; mainly March to October, 1952 to date. Station moved to present site in April 1952. Former records collected at outlet of Anglin Lake about eight miles upstream. Extremes Recorded: Daily - Maximum, 4 May 1955, 1,250 cfs, Minimum, a trickle at various times; Instantaneous Maximum - 27 April 1953, 1,300 cfs (estimated). Remarks: Records fair. Records prior to 1952 considered very low order of accuracy. Discharge affected by storage in Anglin Lake. The 1953 peak discharge occurred when control weir at Anglin Lake washed out.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	b	5	49.0	8.7	10.4	0.8	0.0	39.6	-	-
2.....	-	-		9	49.8	6.0	9.7	0.8	0.0	41.3	-	-
3.....	-	-		15	44.7	4.6	8.4	0.5	0.0	38.8	-	-
4.....	-	-		23	11.3	4.8	8.4	0.4	0.0	14.6	-	-
5.....	-	-		34	4.8	3.7	9.4	0.3	0.0	3.4	-	-
6.....	-	-		43	6.4	3.7	7.7	0.4	0.0	2.7	-	-
7.....	-	-	1e	52	8.1	2.9	5.7	0.3	0.0	3.6	-	-
8.....	-	-		77	10.4	1.8	6.7	0.4	0.0	3.7	-	-
9.....	-	-		108b	12.9	2.6	4.8	0.4	0.0	6.4	-	-
10.....	-	-		165	15.7	2.4	8.7	0.4	0.0	8.1	-	-
11.....	-	-		158	13.5	1.9	4.1	0.2	0.0	8.4	-	-
12.....	-	-		153	20.0	2.6	3.4	0.2	0.0	8.7	-	-
13.....	-	-		145	20.8	2.3	6.7	0.1	0.0	9.4	-	-
14.....	-	-	1	131	86	1.9	9.4	0.0	0.1	10.4	-	-
15.....	-	-	1	120	68	2.2	15.7	0.0	0.1	12.9	-	-
16.....	-	-	1	111	35.6	13.5	6.0	0.0	0.2	16.3	-	-
17.....	-	-	1	102	52	14.6	4.8	0.0	0.0	15.7	-	-
18.....	-	-	1	96	47.2	9.7	3.9	0.0	0.3	16.3	-	-
19.....	-	-	1	91	39.6	14.1	3.2	0.0	0.4	17.8	-	-
20.....	-	-	1	88	38.8	9.7	2.8	0.0	0.8	17.0	-	-
21.....	-	-	1	90	57	9.7	2.6	0.0	2.4	15.7	-	-
22.....	-	-	1	99	38.0	9.4	1.9	0.0	3.2	16.3	-	-
23.....	-	-	1	96	27.7	10.7	2.8	0.0	6.7	16.3	-	-
24.....	-	-	1	86	20.0	11.3	2.6e	0.0	8.7	15.7	-	-
25.....	-	-	1	70	9.4	10.7	2.4e	0.0	8.1	16.3	-	-
26.....	-	-	1	66	8.7	12.4	2.1e	0.0	8.1	18.6	-	-
27.....	-	-	1	59	8.4	8.1	1.9e	0.0	6.9	18.6	-	-
28.....	-	-	1	58	10.4	7.4	1.7e	0.0	6.0	17.8	-	-
29.....	-	-	1	55	8.1	12.9	1.5e	0.0	27.7	17.0	-	-
30.....	-	-	2	52	6.7	11.3	1.2e	0.0	37.2	17.8	-	-
31.....	-	-	3	-	7.7	-	1.0e	0.0	-	17.0	-	-
Mean	-	-	1.10	81.9	27.0	7.25	5.21	0.17	3.90	15.6	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	67	4,870	1,660	432	321	10	232	956	-	-

The Period.....Discharge: Daily - Maximum 10 April, 165
 (245 days) - Minimum at various times, 0.0
 Mean 17.6
 Runoff: Acre-feet 8,550

b - Ice conditions 1 March to 9 April.

e - Estimated.

PRAIRIE CREEK NEAR ROCKY MOUNTAIN HOUSE - STATION No. 5DB₂

Location: Lat. 52° 16' 20", long. 114° 55' 50", in NE. 1/4 sec. 16, tp. 38, rge. 7, W. 5th Mer., Alberta, about four miles above confluence with Clearwater River. Drainage Area: 318 square miles. Gauge: Wire-weight. Measurement of Discharge: From cableway or by wading. Period of Record: Part-year records 1922 to 1925 and 1951; March to October, 1952 to date. Extremes Recorded: Daily - Maximum, 26 August 1954, 3,320 cfs, Minimum, 1 April 1924, 6 cfs. Remarks: Records good during open-water period and fair during ice period.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	51b	77	193	238	448	184	110	84	-	-
2.....	-	-	71	74	245	255	631	189	104	94	-	-
3.....	-	-	68	71	309	284	532	189	94	96	-	-
4.....	-	-	63	74	343	245	410	180	100	92	-	-
5.....	-	-	66	77	367	301	352	196	106	94	-	-
6.....	-	-	34	91	268	240	346	169	94	87	-	-
7.....	-	-	55	115	312	184	343	180	94	82	-	-
8.....	-	-	58	139	346	232	320	165	92	87	-	-
9.....	-	-	68	134	332	215	293	147	100	124	-	-
10.....	-	-	75	178	312	205	284	176	96	90	-	-
11.....	-	-	69	215	284	207	282	154	94	88	-	-
12.....	-	-	63	235	271	198	332	140	92	90	-	-
13.....	-	-	60	233	266	184	358	136	167	84	-	-
14.....	-	-	52	297	225	196	326	136	222	75	-	-
15.....	-	-	48	246	205	207	335	132	193	66	-	-
16.....	-	-	54	223b	184	200	352	134	176	85	-	-
17.....	-	-	54	205	184	205	416	130	147	90	-	-
18.....	-	-	50	187	162	230	376	128	145	88	-	-
19.....	-	-	44	184	165	240	263	124	136	88	-	-
20.....	-	-	49	193	151	215	255	120	124	90	-	-
21.....	-	-	50	180	154	205	235	108	104	87	-	-
22.....	-	-	54	165	156	151	245	110	98	92	-	-
23.....	-	-	60	158	154	169	287	116	102	92	-	-
24.....	-	-	55	147	151	160	295	116	98	88	-	-
25.....	-	-	52	140	140	145	245	106	92	88	-	-
26.....	-	-	63	132	132	145	222	114	88	87	-	-
27.....	-	-	60	124	134e	147	207	110	81	108	-	-
28.....	-	-	65	136	136e	298	203	114	84	92	-	-
29.....	-	-	68	134	138e	432	210	112	76	98	-	-
30.....	-	-	66	128	140	438	193	118	84	92	-	-
31.....	-	-	65	-	193	-	188e	90	-	88	-	-
Mean	-	-	58.4	156	218	221	316	139	113	89.9	-	-
Per sq. mi.	-	-	0.18	0.49	0.69	0.69	0.99	0.44	0.36	0.28	-	-
Acre-feet	-	-	3,590	9,310	13,390	13,140	19,410	8,570	6,730	5,530	-	-

The Period.....Discharge: Daily - Maximum 2 July, 631
(245 days) - Minimum 6 March, 34

Mean 164; Per Square Mile 0.52

Runoff: Acre-feet 79,670; Depth in inches on drainage area 4.70

b - Ice conditions 1 March to 16 April.

e - Estimated.

Location: Lat. 53° 33' 20", long. 114° 44' 00", in SW. 1/4 sec. 7, tp. 53, rge. 5, W. 5th Mer., Alberta. Gauge: Staff. Period of Record: Part-year records 1955 to date. Extremes Recorded: Daily - Maximum, 23 June 1956, 2,372.74 feet (a higher elevation of 2,372.87 feet was observed on 28 June 1956 during strong wind conditions), Minimum, 10 October 1958, 2,370.55 feet. Remarks: Elevations are referred to standard iron bench mark near trees one hundred and fifty feet south of pier, elevation 2,378.27 feet (Canadian National Railways datum).

Daily Elevations in Feet for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	-	2,371.86	-	-	-	-	-	-	-
2.....	-	-	-	-	-	-	-	-	-	2,371.06	-	-
3.....	-	-	-	-	-	-	2,371.64	-	-	-	-	-
4.....	-	-	-	-	-	-	-	-	2,370.91	-	2,370.97	-
5.....	-	-	-	-	-	2,371.73	-	-	-	-	-	-
6.....	-	-	-	-	2,371.86	-	-	-	-	-	-	-
7.....	-	-	-	-	-	-	-	2,371.39	-	-	-	-
8.....	-	-	-	-	2,371.82	-	-	-	-	-	-	-
9.....	-	-	-	-	-	-	-	-	-	-	-	-
10.....	-	-	-	-	-	-	2,371.63	-	-	2,370.55	-	-
11.....	-	-	-	-	-	-	-	-	-	-	-	-
12.....	-	-	2,371.47	-	-	-	-	-	2,370.60	-	-	-
13.....	-	-	-	-	-	2,371.68	-	-	-	-	-	-
14.....	-	-	-	-	-	-	-	2,371.63	-	-	-	-
15.....	-	-	-	-	2,371.79	-	-	-	-	-	-	-
16.....	-	-	-	-	-	-	-	-	-	-	-	-
17.....	-	-	-	-	-	-	2,371.51	-	-	2,371.04	-	-
18.....	-	-	-	-	-	-	-	-	2,371.29	-	-	-
19.....	-	-	-	-	-	2,371.69	-	-	-	-	-	-
20.....	-	-	-	-	-	-	-	-	-	-	-	-
21.....	-	-	-	-	-	-	-	2,371.28	-	-	-	-
22.....	-	-	-	-	2,371.81	-	-	-	-	-	-	-
23.....	-	-	-	-	-	-	-	-	-	-	-	-
24.....	-	-	-	-	-	-	2,371.52	-	-	2,371.02	-	-
25.....	-	-	-	-	-	-	-	-	2,371.17	-	-	-
26.....	-	-	-	-	-	2,371.60	-	-	-	-	-	-
27.....	-	-	-	-	-	-	-	2,371.15	-	-	-	-
28.....	-	-	2,371.58	-	-	-	-	2,371.18	-	-	-	-
29.....	-	-	-	-	2,371.72	-	-	-	-	-	-	-
30.....	-	-	-	-	-	-	-	-	-	-	-	-
31.....	-	-	-	-	-	-	2,371.49	-	-	-	-	-

Location: Lat. 53° 40' 40", long. 114° 21' 30", in lot 19, Alberta Beach, Lac Ste. Anne Settlement, sec. 22, tp. 54, rge. 3, W. 5th Mer., Alberta. Gauge: Staff. Period of Record: Mainly May to October, 1933 to date. Extremes Recorded: Daily - Maximum, 2 July 1944, 100.30 feet, Minimum, 12 to 23 October 1939, 94.95 feet. Remarks: Gauge heights are referred to bench mark on stone porch of hotel, at southwest corner of post, gauge height 104.23 feet. Daily gauge heights for years 1950 to 1955 are included in this paper.

Daily Gauge Heights in Feet for Calendar Years 1950 and 1951

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1950												
1.....	-	-	-	-	96.57	-	-	-	-	-	-	-
2.....	-	-	-	-	-	-	-	-	-	95.50	-	-
3.....	-	-	-	-	-	-	96.22	-	-	-	-	-
4.....	-	-	-	-	-	-	-	-	95.84	-	-	-
5.....	-	-	-	-	-	96.39	-	-	-	-	-	-
6.....	-	-	-	-	-	-	-	-	-	-	-	-
7.....	-	-	-	-	-	-	-	96.05	-	-	-	-
8.....	-	-	-	-	96.56	-	-	-	-	-	-	-
9.....	-	-	-	-	-	-	-	-	-	95.49	-	-
10.....	-	-	-	-	-	-	96.14	-	-	-	-	-
11.....	-	-	-	-	-	-	-	-	95.76	-	-	-
12.....	-	-	-	-	-	96.40	-	-	-	-	-	-
13.....	-	-	-	-	-	-	-	-	-	-	-	-
14.....	-	-	-	-	-	-	-	96.04	-	-	-	-
15.....	-	-	-	-	96.55	-	-	-	-	-	-	-
16.....	-	-	-	-	-	-	-	-	-	95.52	-	-
17.....	-	-	-	-	-	-	96.25	-	-	-	-	-
18.....	-	-	-	-	-	-	-	-	95.67	-	-	-
19.....	-	-	-	-	-	96.34	-	-	-	-	-	-
20.....	-	-	-	-	-	-	-	-	-	-	-	-
21.....	-	-	-	-	-	-	-	95.99	-	-	-	-
22.....	-	-	-	-	96.55	-	-	-	-	-	-	-
23.....	-	-	-	-	-	-	-	-	-	95.51	-	-
24.....	-	-	-	-	-	-	96.16	-	-	-	-	-
25.....	-	-	-	-	-	-	-	-	95.67	-	-	-
26.....	-	-	-	-	-	96.29	-	-	-	-	-	-
27.....	-	-	-	-	-	-	-	-	-	-	-	-
28.....	-	-	-	-	-	-	-	95.90	-	-	-	-
29.....	-	-	-	-	96.45	-	-	-	-	-	-	-
30.....	-	-	-	-	-	-	-	-	-	95.52	-	-
31.....	-	-	-	-	96.60	-	96.12	-	-	-	-	-
1951												
1.....	-	-	-	-	95.88	96.20	-	-	-	-	-	-
2.....	-	-	-	-	-	-	96.01	-	-	95.83	-	-
3.....	-	-	-	-	-	-	-	-	-	-	-	-
4.....	-	-	-	-	96.23	-	-	-	95.99	-	-	-
5.....	-	-	-	-	-	96.17	-	-	-	-	-	-
6.....	-	-	-	-	-	-	-	-	-	-	-	-
7.....	-	-	-	-	-	-	-	96.15	-	-	-	-
8.....	-	-	-	-	96.27	-	-	-	-	-	-	-
9.....	-	-	-	-	-	-	96.08	96.18	-	95.82	-	-
10.....	-	-	-	-	-	-	-	-	-	-	-	-
11.....	-	-	-	-	96.26	-	-	-	95.97	-	-	-
12.....	-	-	-	-	-	96.21	-	-	-	-	-	-
13.....	-	-	-	-	-	-	-	-	-	-	-	-
14.....	-	-	-	-	-	-	-	96.14	-	-	-	-
15.....	-	-	-	-	96.27	-	-	-	-	-	-	-
16.....	-	-	-	-	-	-	-	-	-	95.74	-	-
17.....	-	-	-	-	-	-	96.07	-	-	-	-	-
18.....	-	-	-	-	-	-	-	-	95.92	-	-	-
19.....	-	-	-	-	-	96.10	-	-	-	-	-	-
20.....	-	-	-	-	-	-	-	-	-	-	-	-
21.....	-	-	-	-	-	-	-	96.10	-	-	-	-
22.....	-	-	-	-	96.32	-	-	-	-	-	-	-
23.....	-	-	-	-	-	-	-	-	-	95.74	-	-
24.....	-	-	-	-	-	-	96.06	-	-	-	-	-
25.....	-	-	-	-	-	-	-	-	95.85	-	-	-
26.....	-	-	-	-	-	96.11	-	-	-	-	-	-
27.....	-	-	-	-	-	-	-	-	-	-	-	-
28.....	-	-	-	-	-	-	-	95.99	-	-	-	-
29.....	-	-	-	-	96.25	-	-	-	-	-	-	-
30.....	-	-	-	-	-	-	96.16	-	95.84	95.84	-	-
31.....	-	-	-	-	-	-	96.12	-	-	-	-	-

Daily Gauge Heights in Feet for Calendar Years 1952 and 1953

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1952												
1.....	-	-	-	-	96.40	-	-	-	-	-	-	-
2.....	-	-	-	-	-	-	-	-	-	97.06	-	-
3.....	-	-	-	-	-	-	96.88	-	-	-	-	-
4.....	-	-	-	-	-	-	-	-	97.08	-	-	-
5.....	-	-	-	-	-	96.38	-	-	-	-	-	-
6.....	-	-	-	-	96.45	-	-	-	-	-	-	-
7.....	-	-	-	-	-	-	-	97.10	-	-	-	-
8.....	-	-	-	-	96.42	-	-	-	-	-	-	-
9.....	-	-	-	-	-	-	-	-	-	97.02	-	-
10.....	-	-	-	-	-	-	96.88	-	-	-	-	-
11.....	-	-	-	-	-	-	-	-	97.06	-	-	-
12.....	-	-	-	-	-	96.43	-	-	-	-	-	-
13.....	-	-	-	-	-	-	-	-	-	-	-	-
14.....	-	-	-	-	-	-	-	97.09	-	-	-	-
15.....	-	-	-	-	96.44	-	-	-	-	-	-	-
16.....	-	-	-	-	-	-	-	-	-	97.00	-	-
17.....	-	-	-	-	-	-	96.88	-	-	-	-	-
18.....	-	-	-	-	-	-	-	-	97.09	-	-	-
19.....	-	-	-	-	-	96.60	-	-	-	-	-	-
20.....	-	-	-	-	-	-	-	97.01	-	-	-	-
21.....	-	-	-	-	-	-	-	97.01	-	-	-	-
22.....	-	-	-	-	-	-	97.06	-	-	-	-	-
23.....	-	-	-	-	96.44	-	-	-	-	97.00	-	-
24.....	-	-	-	-	-	-	97.06	-	-	-	-	-
25.....	-	-	-	-	-	-	-	-	97.09	-	-	-
26.....	-	-	-	-	-	96.86	-	-	-	-	-	-
27.....	-	-	-	-	-	-	-	-	-	-	-	-
28.....	-	-	-	-	-	-	-	96.95	-	-	-	-
29.....	-	-	-	-	96.42	-	-	-	-	-	-	-
30.....	-	-	-	-	-	-	-	-	-	97.03	-	-
31.....	-	-	-	-	-	-	97.10	-	-	-	-	-
1953												
1.....	-	-	-	-	97.62	-	-	-	-	-	-	-
2.....	-	-	-	-	-	-	-	-	-	98.55	-	-
3.....	-	-	-	-	-	-	98.01	98.45	-	-	-	-
4.....	-	-	-	-	97.71	-	-	98.53	98.74	-	-	-
5.....	-	-	-	-	-	97.88	-	98.54	-	98.53	-	-
6.....	-	-	-	-	-	-	-	-	-	-	-	-
7.....	-	-	-	-	-	-	-	98.59	-	-	-	-
8.....	-	-	-	-	97.73	-	-	-	-	-	-	-
9.....	-	-	-	-	97.93	-	-	-	-	98.53	-	-
10.....	-	-	-	-	-	-	97.93	-	-	-	-	-
11.....	-	-	-	-	97.85	-	-	-	98.71	-	-	-
12.....	-	-	-	-	-	97.95	-	-	-	-	-	-
13.....	-	-	-	-	-	-	-	-	-	-	-	-
14.....	-	-	-	-	97.85	-	-	98.60	-	-	-	-
15.....	-	-	-	-	97.87	-	-	-	-	98.50	-	-
16.....	-	-	-	-	-	-	-	-	-	98.50	-	-
17.....	-	-	-	-	-	-	97.91	-	-	-	-	-
18.....	-	-	-	-	-	-	-	-	98.69	-	-	-
19.....	-	-	-	-	-	97.95	-	-	-	-	-	-
20.....	-	-	-	-	-	-	-	-	-	-	-	-
21.....	-	-	-	-	-	-	-	98.59	98.65	-	-	-
22.....	-	-	-	-	97.87	-	-	-	-	-	-	-
23.....	-	-	-	-	-	-	-	-	-	98.49	-	-
24.....	-	-	-	-	-	-	-	-	-	-	-	-
25.....	-	-	-	-	-	-	97.91	-	-	-	-	-
26.....	-	-	-	-	-	98.02	-	-	-	-	-	-
27.....	-	-	-	-	-	-	-	98.72	-	-	-	-
28.....	-	-	-	-	-	-	-	98.74	-	-	-	-
29.....	-	-	-	-	97.85	-	97.89	-	-	-	-	-
30.....	-	-	-	-	-	-	97.85	-	98.57	98.40	-	-
31.....	-	-	-	-	-	-	98.00	-	-	-	-	-

Daily Gauge Heights in Feet for Calendar Years 1954 and 1955

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1954												
1.....	-	-	-	-	-	-	-	-	99.80	-	-	-
2.....	-	-	-	-	-	98.90	-	-	-	99.65*	-	-
3.....	-	-	-	-	-	-	100.07	-	99.83	-	-	-
4.....	-	-	-	-	-	-	-	99.65	99.84	-	-	-
5.....	-	-	-	-	-	99.00	100.09	-	-	99.53	-	-
6.....	-	-	-	-	-	-	-	99.69	-	-	-	-
7.....	-	-	-	-	-	99.33	-	99.66	-	-	-	-
8.....	-	-	-	-	-	-	-	-	-	99.49	-	-
9.....	-	-	-	-	-	99.60	-	-	-	99.49	-	-
10.....	-	-	-	-	-	-	100.04	-	-	-	-	-
11.....	-	-	-	-	-	99.76	-	-	99.80*	-	-	-
12.....	-	-	-	-	98.09	99.84	-	99.75	99.85	-	-	-
13.....	-	-	-	-	-	-	99.95	-	-	-	-	-
14.....	-	-	-	-	-	99.95	-	99.77	-	99.35	-	-
15.....	-	-	-	-	98.22	-	-	-	-	99.37	-	-
16.....	-	-	-	-	-	-	-	-	-	99.37	-	-
17.....	-	-	-	-	98.27	-	99.92	-	99.80	-	-	-
18.....	-	-	-	-	-	-	-	-	99.80	99.35	-	-
19.....	-	-	-	-	-	100.08	-	-	-	-	-	-
20.....	-	-	-	-	-	-	-	-	-	-	-	-
21.....	-	-	-	-	-	-	-	99.71	-	-	-	-
22.....	-	-	-	-	98.34	-	-	-	99.74	-	-	-
23.....	-	-	-	-	-	-	-	-	-	99.27	-	-
24.....	-	-	-	-	-	100.12	99.80	-	-	-	-	-
25.....	-	-	-	-	-	-	-	99.69	99.70	-	-	-
26.....	-	-	-	-	98.55	100.05*	99.75	-	-	-	-	-
27.....	-	-	-	-	98.64	-	-	-	-	-	-	-
28.....	-	-	-	-	98.70	100.14	-	99.69	-	-	-	-
29.....	-	-	-	-	98.79	-	-	-	-	-	-	-
30.....	-	-	-	-	-	-	99.71	-	-	99.16	-	-
31.....	-	-	-	-	-	-	99.71	-	-	99.15	-	-
1955												
1.....	-	-	-	-	98.31	-	-	97.89	-	-	-	-
2.....	-	-	-	-	-	-	-	-	-	-	-	-
3.....	-	-	-	-	-	-	-	-	-	97.36	-	-
4.....	-	-	-	-	-	-	97.88	-	-	-	-	-
5.....	-	-	-	-	98.43	-	-	-	97.49	-	-	-
6.....	-	-	-	-	-	98.36	-	-	97.45	-	-	-
7.....	-	-	-	-	98.45	-	-	-	-	-	-	-
8.....	-	-	-	-	-	-	98.05	97.76	-	97.37	-	-
9.....	-	-	-	-	98.51	-	-	-	-	-	-	-
10.....	-	-	-	-	-	-	-	-	-	97.36	-	-
11.....	-	-	-	-	-	-	97.96	-	-	-	-	-
12.....	-	-	-	-	-	-	-	-	97.31	-	-	-
13.....	-	-	-	-	-	98.21	97.94	-	-	-	-	-
14.....	-	-	-	-	-	-	-	-	-	-	-	-
15.....	-	-	-	-	-	-	-	97.68	-	97.31	-	-
16.....	-	-	-	-	98.45	-	-	-	-	-	-	-
17.....	-	-	-	-	-	-	-	-	-	97.32	-	-
18.....	-	-	-	-	-	-	97.88	-	-	97.30	-	-
19.....	-	-	-	-	-	-	-	-	97.41	-	-	-
20.....	-	-	-	-	-	98.13	-	-	-	-	-	-
21.....	-	-	-	98.04	-	-	-	-	97.46	-	-	-
22.....	-	-	-	-	-	-	-	97.62	-	-	-	-
23.....	-	-	-	-	98.46	-	97.74	-	-	-	-	-
24.....	-	-	-	-	-	98.07	-	-	-	97.30	-	-
25.....	-	-	-	-	-	-	97.81	-	-	-	-	-
26.....	-	-	-	-	-	-	-	-	97.46	-	-	-
27.....	-	-	-	-	-	98.01	97.91	-	-	-	-	-
28.....	-	-	-	-	-	-	-	97.54	-	-	-	-
29.....	-	-	-	-	-	-	-	-	-	-	-	-
30.....	-	-	-	-	98.36	-	-	-	97.41	-	-	-
31.....	-	-	-	-	-	-	-	-	-	97.31	-	-

* - Reading made during strong wind.

Daily Gauge Heights in Feet for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	-	97.59	-	-	-	-	-	-	-
2.....	-	-	-	-	-	-	-	-	-	97.18	-	-
3.....	-	-	-	-	-	-	97.47	-	-	-	-	-
4.....	-	-	-	-	-	-	-	-	97.03	-	97.07	-
5.....	-	-	-	-	-	97.55	-	-	-	-	-	-
6.....	-	-	-	-	97.66	-	-	-	-	-	-	-
7.....	-	-	-	-	-	-	-	97.26	-	-	-	-
8.....	-	-	-	-	97.64	-	-	-	-	-	-	-
9.....	-	-	-	-	-	-	-	-	-	97.15	-	-
10.....	-	-	-	-	-	-	97.37	-	-	-	-	-
11.....	-	-	-	-	97.64	-	-	-	96.92	-	-	-
12.....	-	-	-	-	-	97.46	-	-	-	-	-	-
13.....	-	-	97.21	-	-	-	-	-	-	-	-	-
14.....	-	-	-	-	-	-	-	97.24	-	-	-	-
15.....	-	-	-	-	-	-	-	-	-	-	-	-
16.....	-	-	-	-	-	-	-	-	-	97.11	-	-
17.....	-	-	-	-	-	-	97.34	-	-	-	-	-
18.....	-	-	-	-	-	-	-	-	97.24	-	-	-
19.....	-	-	-	-	-	97.49	-	-	-	-	-	-
20.....	-	-	-	-	-	-	-	-	-	-	-	-
21.....	-	-	-	-	-	-	-	97.13	-	-	-	-
22.....	-	-	-	-	97.49	-	-	-	-	-	-	-
23.....	-	-	-	-	-	-	-	-	-	97.03	-	-
24.....	-	-	-	-	-	-	97.32	-	-	-	-	-
25.....	-	-	-	-	-	-	-	-	97.24	-	-	-
26.....	-	-	-	-	-	97.38	-	-	-	-	-	-
27.....	-	-	-	-	-	-	-	97.10	-	-	-	-
28.....	-	-	-	97.61	-	-	-	97.05	-	-	-	-
29.....	-	-	-	-	-	-	-	-	-	-	-	-
30.....	-	-	-	-	-	-	-	-	-	97.03	-	-
31.....	-	-	-	-	-	-	97.24	-	-	-	-	-

MISCELLANEOUS DISCHARGE MEASUREMENTS MADE IN NORTH SASKATCHEWAN RIVER TRIBUTARY BASIN
FOR WATER YEAR 1957-58

Date	Stream	Location	Discharge cfs
8 Jan.	Brazeau River	At Big Bend	519b
2 Feb.	"	"	397b
25 Feb.	"	"	417b
15 March	"	"	348b
26 March	"	"	380b
3 Oct.	North Saskatchewan River	At Borden	6,420
8 Oct.	"	"	6,620
11 Oct.	"	"	7,380
15 Oct.	"	"	6,850
18 Oct.	"	"	5,900
24 June	"	"	15,880
6 July	"	"	44,300
13 Sept.	Vermilion River	At Lea Park	5.6

b - Ice conditions.

SOUTH SASKATCHEWAN RIVER AT MEDICINE HAT - STATION No. 5AJ₁

Location: Lat. 50° 02' 35", long. 110° 40' 40", in NW. 1/4 sec. 31, tp. 12, rge. 5, W. 4th Mer., Alberta, at traffic bridge in City of Medicine Hat. Drainage Area: 22,500 square miles (revised). Gauge: Wire-weight. Measurement of Discharge: From bridge. Period of Record: June 1911 to date except September and October 1911 and October 1934 to February 1935. Average Discharge: (45 years) - 7,473 cfs. Extremes Recorded: Daily - Maximum, 11 June 1953, 144,300 cfs, Minimum, 22 November 1929, 360 cfs; Instantaneous Maximum - 8 to 9 a.m., 11 June 1953, 151,800 cfs. Revisions: Drainage area, 1917 Report; May 1926 mean discharge was published in error in W.R.P. 54 and should be 5,530; February 1943 mean discharge has been corrected to 2,750 cfs; 1911, 1935, 1938, 1943 and 1949, W.R.P. 117. Remarks: Floods are known to have occurred in 1899, 1902 and 1908. Peak discharge is estimated to have been 200,000 cfs in 1902 and 185,000 cfs in 1908. Peak discharge in 1899 is believed to have been lower than in 1902 and 1908.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	2,640	4,210	2,820	1,380	2,680	5,700	6,130	4,530	19,160	11,940	6,800	3,240e
2.....	1,800	4,390	1,970	1,410	2,420	4,930	9,550	4,080	17,270	14,420	7,670	3,520
3.....	1,750	4,940	2,700	1,240	2,150	4,160	12,190	4,450	15,880	14,370	8,940	3,520
4.....	1,680	5,490	3,430	1,300	2,580	3,680	9,410	7,860e	17,690	12,430	7,090	3,500
5.....	1,520	5,310	3,410	2,040	3,020	4,600	12,270	11,260	16,250	12,470	6,540	2,990
6.....	1,860e	4,960	4,580	2,780	3,470	4,740	16,750	8,970	16,570	12,380	6,110	2,780
7.....	2,190	4,660	6,040	3,290	3,390	4,340	19,220	9,280	19,780	12,300	7,150	2,680e
8.....	3,120	5,050	4,440	3,430	3,700	3,750	17,620b	9,630	19,740	12,140	5,770	2,580
9.....	3,100	4,310	2,840	2,560	3,140	3,480	17,740	9,660	17,930	11,500	5,170	2,830
10.....	3,530	4,120	3,930	2,860	2,580	3,210	16,020	11,030	16,710	18,120	5,440	2,780
11.....	3,450	3,940	5,020	3,600	2,870	3,370	15,750	15,930	16,570	17,500	5,170	2,620
12.....	3,770	3,750	4,660	3,520	3,390	3,650	15,030	18,680	16,250	15,030	3,840	2,190
13.....	3,800e	4,440	6,310	3,450	2,980	3,930	13,380	19,980	22,880	14,420e	3,650	1,680
14.....	3,830e	3,950	4,820	3,210	2,580	3,450	14,680	20,120	22,880	13,810	4,500	1,960e
15.....	3,860	3,450	4,300	2,590	2,640	3,270	16,250	22,730	22,580	11,780	2,970	2,230
16.....	3,680e	4,260	3,770	3,180	3,280	3,220	19,640	21,270	21,800	16,160	2,990	2,500
17.....	3,490	3,920	3,290	3,270	3,930	3,180	17,980	19,980	20,650	16,200	3,400	1,980
18.....	3,960	3,570	2,890	2,870	3,600	3,230	14,020	19,350	19,400	15,620	3,020	2,220
19.....	3,840	3,620	2,500	2,730	3,100	2,610	12,340	19,740	16,160	14,370	2,990	2,220
20.....	3,220e	4,230	2,110	2,590	2,770	2,610	10,200	19,350	13,470	13,080	3,340	2,530
21.....	2,610	3,620	1,820	2,630	3,370	2,450	9,660	18,870	13,170	11,780	2,930	2,560e
22.....	2,540b	4,210	2,060	3,140	3,700	2,430	9,490	17,600	14,660e	10,350	2,880	2,600
23.....	2,460	3,310	2,310	3,140	4,190	3,380	8,660	17,980	16,160	11,540	2,950	2,260
24.....	2,580	3,840	1,850	3,620	4,680	4,340	8,300	20,700	15,570	9,420	2,780e	2,290
25.....	3,100	4,360	1,820	3,060	4,800	4,000	8,060	20,980	14,200	8,830	2,620	2,030
26.....	3,120	3,770	1,800	2,880	4,930	4,260	8,300	21,030	12,430	8,700	3,360	2,090
27.....	3,060	6,100	1,770	2,700	5,050	4,880	6,810e	20,600	11,300	9,360e	3,170	1,850
28.....	3,100	4,230	1,870	2,320	5,050	5,020	5,320	19,500	10,270	10,020	3,090	2,120e
29.....	3,140	3,430	1,780	2,820	-	5,340	5,120	18,780	10,630e	9,240	3,340	2,390
30.....	3,140	3,680	1,690	3,310	-	5,250	5,500	17,270	10,990	7,730	2,670	2,090
31.....	4,000	-	1,340	2,870	-	5,160	-	17,550	-	8,060	2,950e	-
Mean	2,998	4,237	3,095	2,767	3,430	3,923	12,050	15,770	16,630	12,420	4,364	2,494
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet in 1,000	184.3	252.1	190.3	170.2	190.5	241.2	716.8	969.4	989.8	763.8	268.3	148.4

The Year..... Discharge: Daily - Maximum 13 and 14 June, 22,880
 - Minimum 3 January, 1,240

Mean 7,024

Runoff: Acre-feet 5,085,000

b - Ice conditions 22 October to 8 April.

e - Estimated.

Location: Lat. 51° 29', long. 107° 04', in SW. 1/4 sec. 16, tp. 29, rge. 8, W. 3rd Mer., Saskatchewan. Drainage Area: 51,300 square miles (revised). Gauge: Wire-weight. Measurement of Discharge: From bridge. Period of Record: Gauge heights only during 1935; daily discharges, mainly open water, 1947 to date. Extremes Recorded: Daily - Maximum, 8 June 1953, 130,500 cfs, Minimum, 5 October 1949, 1,250 cfs; Instantaneous Maximum, 10 p.m., 13 June 1953, 148,500 cfs. Remarks: Records fair. There are many irrigation and power developments in the basin above this station whose operation affect the discharge. Most of basic data supplied by P. F. R. A.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	- b	13,220	24,920e	17,540	14,160	6,120e	5,270	-	-
2.....	-	-	-	-	12,520	24,630	17,140	15,160	6,230	4,890	-	-
3.....	-	-	-	-	11,770	24,200	15,590	13,880e	6,370	4,800	-	-
4.....	-	-	-	-	10,830	23,330	14,890	12,590	6,400	4,780	-	-
5.....	-	-	-	-	10,350	22,720	14,840	11,940	6,290	4,570	-	-
6.....	-	-	-	-	10,250	23,950	16,920	11,700	5,930	4,720	-	-
7.....	-	-	-	-	9,180	22,900	18,000	11,060	5,920e	4,720	-	-
8.....	-	-	-	-	8,150	21,380	19,460	11,600	5,900	4,540	-	-
9.....	-	-	-	-	9,040	23,270	19,580	11,550	5,980	4,560e	-	-
10.....	-	-	-	- b	11,750	22,290	18,580	10,440	5,900	4,590	-	-
11.....	-	-	-	34,380	12,320e	21,930	19,170	9,820	5,820	4,460	-	-
12.....	-	-	-	32,380	12,890	24,130	19,460	9,820	5,540	4,400e	-	-
13.....	-	-	-	39,800	14,520	26,080	19,200e	9,820	5,240	4,330e	-	-
14.....	-	-	-	38,310	14,520	24,200	18,930	9,320	5,240e	4,270	-	-
15.....	-	-	-	37,110	14,730	22,600	22,480	8,650	5,240	4,570e	-	-
16.....	-	-	-	35,150	16,920	22,230	24,820	8,190	5,040e	4,870e	-	-
17.....	-	-	-	33,340	21,060e	22,780	23,210	7,830e	4,830	5,170	-	-
18.....	-	-	-	32,100	25,200	27,760	21,380	7,470e	5,100	4,960	-	-
19.....	-	-	-	32,030	25,950	28,350	20,420	7,110	4,920	5,040e	-	-
20.....	-	-	-	34,310	27,620	27,820	18,640	7,210	4,690	5,120	-	-
21.....	-	-	-	33,480	26,340	26,440e	19,640	7,020	4,780e	5,120	-	-
22.....	-	-	-	31,140	23,640	25,070	22,230	6,870	4,870	4,850	-	-
23.....	-	-	-	27,040	23,510	24,010	21,930	6,780	4,900e	4,960	-	-
24.....	-	-	-	24,220	23,450	21,380	20,420	6,660	4,940	5,720	-	-
25.....	-	-	-	21,390	23,080	19,750e	18,930	6,520	5,150	6,150	-	-
26.....	-	-	-	18,640	22,350	18,120	17,830	6,450e	5,150	5,590	-	-
27.....	-	-	-	16,780	22,050	19,170	16,520	6,390e	5,360	5,590	-	-
28.....	-	-	-	16,110	21,740	20,300	16,190	6,320	5,460e	5,960e	-	-
29.....	-	-	-	14,600	23,890	20,180	15,480	6,180	5,560	6,340	-	-
30.....	-	-	-	13,840	24,570	19,520	14,110	6,180	5,360	5,790e	-	-
31.....	-	-	-	-	25,200	-	14,010	6,010	-	5,240	-	-
Mean	-	-	-	-	17,830	23,180	18,630	9,055	5,474	5,030	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet in 1,000	-	-	-	-	1,096	1,379	1,146	556.8	325.7	309.3	-	-

The Period..... Discharge: Daily - Maximum 13 April, 39,800 (may have been higher on 10 April)

- Minimum 14 October, 4,270

Mean 13,190

Runoff: Acre-feet 4,813,000

b - Ice conditions 1 to 10 April.

e - Estimated.

Location: Lat. 52° 07' 20", long. 106° 40' 00", in SW. 1/4 sec. 28, tp. 36, rge. 5, W. 3rd Mer., Saskatchewan, at Canadian National Railways bridge in the City of Saskatoon. Drainage Area: 53,900 square miles (revised). Gauge: Wire-weight. Measurement of Discharge: From bridge. Period of Record: May 1911 to date. Average Discharge: (46 years) - 10,060 cfs. Extremes Recorded: Daily - Maximum, 15 June 1953, 138,900 cfs, Minimum, 12 December 1936, 502 cfs; Instantaneous Maximum - 2 a.m., 15 June 1953, 147,500 cfs. Revisions: Drainage area, 1917 Report; 1913, 1915 to 1919, 1923, 1924 and 1944, W.R.P. 117. Runoff data for April 1936 and for the water year 1935-36 have been corrected to 871,700 and 4,324,000 acre-feet respectively. Remarks: Records good during open-water periods and fair during ice periods. There are many power and irrigation developments in the basin above this station whose operation affect the discharge.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	2,980	6,840	2,690	1,800	2,940	2,480	3,720	12,620	23,020	16,840	12,390	5,310
2.....	3,500	5,630	2,560	1,680	3,030	2,690	3,860	12,150	23,370	14,550	13,330	5,160
3.....	4,270	5,530	1,920	1,320	3,110	2,860	4,550	10,740	22,540	14,420	13,630	5,070
4.....	4,460	5,080	2,690	1,540	3,370	2,730	4,320	10,360	21,920	14,120	12,910	5,550
5.....	3,900	5,330	2,440	1,390	3,370	2,360	4,600	9,600	20,620	14,300	11,470	5,700
6.....	3,630	5,730	2,690	1,650	3,240	2,770	9,670	9,070	20,210	13,990	11,300	5,800
7.....	3,200	5,730	3,500	1,880	2,980	2,980	11,000	8,810	20,140	14,240	10,850	5,310
8.....	3,590	5,130	3,680	1,920	2,770	3,550	9,940	8,050	20,010	15,930	10,300	4,920
9.....	3,680	5,630	3,860	1,990	2,730	3,860	10,720	7,640	18,740	17,480	10,360	5,460
10.....	3,900	5,930	3,590	1,920	2,600	3,680	11,570	7,790	20,210	18,010	10,960	5,110
11.....	3,460	6,240e	2,980	1,720	2,690	3,810	12,030	8,200	19,940	18,010	9,980	5,020
12.....	2,980	6,540	2,940	1,720	2,150	3,860	9,460	11,810	20,890	18,010	9,340	5,360
13.....	2,900	5,930	2,650	1,680	1,920	3,770	11,230	11,980	21,430	17,680	9,390	5,070
14.....	2,560	7,250	2,520	1,570	2,110	3,590	12,860	12,440	21,850	17,620	8,860	4,680
15.....	3,200	6,840	2,460	1,390	2,480	3,630	13,340	12,910	21,130e	18,140	8,760	4,500
16.....	3,200	5,530	2,390	1,540	2,770	3,630	21,570	12,740	20,410	19,000	7,740	4,260
17.....	4,130	5,780	2,320	1,610	2,770	3,720	30,120b	15,310e	19,740	19,540	7,640	4,170
18.....	4,360	4,940	2,480	2,600	2,900	3,900	29,200	17,880e	20,480	21,230	7,290	4,260
19.....	4,690	3,810	2,650	3,110	2,940	3,720	28,770	20,450e	26,400	22,260	6,840	3,990
20.....	4,550	3,160e	3,330	3,370	2,860	3,860	28,910	23,020	27,320	19,810	6,340	3,810
21.....	4,840	2,520b	3,410	3,160	2,940	3,900	29,640	23,440	25,860e	18,140	6,270e	3,590
22.....	5,080	2,110	3,900	3,030	2,980	3,720	29,720	23,790	24,410e	16,900	6,210e	3,550
23.....	4,270b	2,190	3,720	2,980	3,070	3,860	25,970	22,190	22,950	19,670	6,140e	4,310
24.....	4,090	2,400	3,460	3,030	2,650	3,680	23,930	21,710	21,780	20,210	6,070e	4,120
25.....	2,860	2,230	2,440	3,110	2,480	3,410	20,680	20,410	19,000	18,870	6,010e	4,120
26.....	3,110	2,110	2,520	3,330	2,520	3,240	17,750	20,480	17,100	17,160	5,940	4,260
27.....	3,200	2,270	2,230	3,460	2,400	2,900	15,800	20,140	16,250	14,420	5,750	4,450
28.....	3,550b	2,600	2,190	3,280	2,520	3,110	15,420	19,140	16,700	14,860	5,850	4,540
29.....	4,650	2,810	2,320	2,940	-	3,370	14,480	18,940	16,960	14,360	5,550	4,830
30.....	5,280	2,810	2,230	2,940	-	3,240	13,330	21,230	17,950	13,870	5,460	4,730
31.....	5,680	-	2,110	3,110	-	3,410	-	21,570	-	13,510	5,500	-
Mean	3,863	4,554	2,802	2,315	2,760	3,396	15,940	15,370	20,980	17,000	8,530	4,700
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet in 1,000	237.5	271.0	172.3	142.4	153.3	208.8	948.4	945.3	1,248	1,046	524.5	279.7

The Year..... Discharge: Daily - Maximum 17 April, 30,120
- Minimum 3 January, 1,320

Mean 8,532

Runoff: Acre-feet 6,177,000

b - Ice conditions 22 to 28 October and 21 November to 17 April.

e - Estimated.

Location: Lat. 52° 55', long. 105° 48', in SE. 1/4 sec. 13, tp. 45, rge. 27, W. 2nd Mer., Saskatchewan, at combined traffic and railway bridge. Drainage Area: 52,700 square miles. Gauge: Wire-weight. Measurement of Discharge: From bridge. Period of Record: June 1958 to date. Extremes Recorded: Daily - Maximum, 18 July 1958, 22,640 cfs, Minimum, 22 and 30 September 1958, 3,680 cfs. Remarks: Records good.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	-	-	-	-	-	-	-	-	-	17,010	12,910	4,890
2.....	-	-	-	-	-	-	-	-	-	16,620	12,790	4,780
3.....	-	-	-	-	-	-	-	-	-	15,930	12,540	4,400
4.....	-	-	-	-	-	-	-	-	-	14,980	13,290	4,890
5.....	-	-	-	-	-	-	-	-	-	13,550	12,620	5,140
6.....	-	-	-	-	-	-	-	-	-	13,120	11,900	5,590
7.....	-	-	-	-	-	-	-	-	-	12,910	10,640	5,540
8.....	-	-	-	-	-	-	-	-	-	15,740	10,330	5,250
9.....	-	-	-	-	-	-	-	-	-	16,080	10,170	5,110
10.....	-	-	-	-	-	-	-	-	-	17,260	9,950	4,970
11.....	-	-	-	-	-	-	-	-	-	17,820	10,360	4,810
12.....	-	-	-	-	-	-	-	-	-	16,720	9,730	5,080
13.....	-	-	-	-	-	-	-	-	-	17,260	9,030	5,000
14.....	-	-	-	-	-	-	-	-	-	18,430	8,750	4,810
15.....	-	-	-	-	-	-	-	-	-	17,720	8,610	4,560
16.....	-	-	-	-	-	-	-	-	-	17,010	8,470	4,460
17.....	-	-	-	-	-	-	-	-	-	20,200	7,930	4,320
18.....	-	-	-	-	-	-	-	-	-	22,640	7,370	4,190
19.....	-	-	-	-	-	-	-	-	-	20,990	7,140	4,010
20.....	-	-	-	-	-	-	-	-	-	19,310	6,820	3,980e
21.....	-	-	-	-	-	-	-	-	-	18,220	5,860	3,940
22.....	-	-	-	-	-	-	-	-	-	17,110	6,200	3,680
23.....	-	-	-	-	-	-	-	-	-	17,310	6,200	3,960
24.....	-	-	-	-	-	-	-	-	-	20,040	6,010	4,160
25.....	-	-	-	-	-	-	-	-	-	19,680	5,860	4,190
26.....	-	-	-	-	-	-	-	-	18,900	18,220	6,010	4,240
27.....	-	-	-	-	-	-	-	-	20,570	17,110	5,710	3,910
28.....	-	-	-	-	-	-	-	-	15,220	16,370	5,620	4,060
29.....	-	-	-	-	-	-	-	-	16,520	15,030	5,560	4,400
30.....	-	-	-	-	-	-	-	-	18,020	14,340	5,420	3,680
31.....	-	-	-	-	-	-	-	-	-	13,940	5,000	-
Mean	-	-	-	-	-	-	-	-	-	17,050	8,542	4,533
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet in 1,000	-	-	-	-	-	-	-	-	-	1,049	525.2	269.8

The Period.....Discharge: Daily - Maximum 18 July, 22,640
 (92 days) - Minimum 22 and 30 September, 3,680
 Mean 10,100
 Runoff: Acre-feet 1,844,000

e - Estimated.

CARROT RIVER NEAR KINISTINO - STATION No. 5KA₁

Location: Lat. 52° 55', long. 105° 01', in SW. 1/4 sec. 16, tp. 45, rge. 21, W.2nd Mer., Saskatchewan, on bridge, two miles south of Kinistino. Drainage Area: 302 square miles. Gauge: Wire-weight. Measurement of Discharge: From cableway or by wading. Period of Record: Periods of varying length, 1918 to 1931 and 1956 to date. Prior to 1957, records were obtained at various other sites in the vicinity. Extremes Recorded: Daily - Maximum, 18 April 1956, 980 cfs, Minimum, Nil at various times. Revisions: September 1923 and August 1927 mean discharges have been corrected to 8.1 and 22.8 cfs; 1925, W.R.P. 121. Remarks: Records fair.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	1b	1	25.2	33.2	0.4	0.0	0.0	0.1	-	-
2.....	-	-	1	2	25.2	37.7	0.3	0.0	0.0	0.1	-	-
3.....	-	-	1	5	23.6	36.8	0.3	0.0	0.0	0.1	-	-
4.....	-	-	1	28	23.6	32.3	0.3	0.0	0.0	0.1	-	-
5.....	-	-	1	34	23.6	28.7	0.2	0.1	0.0	0.1	-	-
6.....	-	-	1	46	20.4	25.2	0.2	0.0	0.0	0.1	-	-
7.....	-	-	1	49	19.6	20.4	0.2	0.0	0.0	0.1	-	-
8.....	-	-	1	52	20.4	18.8	0.2e	0.0	0.0	0.1	-	-
9.....	-	-	1	64	23.6	10.3	0.2	0.0	0.0	0.2e	-	-
10.....	-	-	1	68	18.0	9.6	0.1	0.0	0.0	0.2	-	-
11.....	-	-	1	60	12.4	6.3	0.1	0.0	0.0	0.2	-	-
12.....	-	-	1	101	20.4	4.7	0.1	0.0	0.0	0.3	-	-
13.....	-	-	1	104b	25.2	3.0	0.0	0.0	0.0	0.3	-	-
14.....	-	-	1	113	22.0	2.0	0.0	0.0	0.0	0.3	-	-
15.....	-	-	1	108	22.0	1.4	0.0	0.0	0.0	0.3	-	-
16.....	-	-	1	100	20.4	1.4	0.0	0.0	0.0	0.2	-	-
17.....	-	-	1	102	18.8	1.3	0.0	0.0	0.1	0.2	-	-
18.....	-	-	1	91	16.4	1.1	0.0	0.0	0.0	0.1	-	-
19.....	-	-	1	88	14.8	1.0	0.0	0.0	0.0	0.0	-	-
20.....	-	-	1	70	16.4	0.9	0.1	0.0	0.1	0.1	-	-
21.....	-	-	1	61	20.4	0.8	0.0	0.0	0.1	0.1	-	-
22.....	-	-	1	48.1	26.0	0.8	0.0	0.0	0.1	0.1	-	-
23.....	-	-	1	45.0	32.3	0.8	0.0	0.0	0.0	0.2	-	-
24.....	-	-	1	37.7	34.1	0.7	0.0	0.0	0.0	0.2	-	-
25.....	-	-	1	35.0	35.9	0.7	0.0	0.0	0.1	0.2	-	-
26.....	-	-	1	30.5	34.1	0.6	0.0	0.0	0.1	0.2	-	-
27.....	-	-	1	30.0e	33.2	0.6	0.1	0.0	0.1	0.2	-	-
28.....	-	-	1	29.6	28.7	0.5	0.1	0.0	0.1	0.2	-	-
29.....	-	-	1	30.5	29.6	0.4	0.1	0.0	0.1	0.2	-	-
30.....	-	-	1	25.2	33.2	0.4	0.0	0.0	0.1	0.2	-	-
31.....	-	-	1	-	37.7	-	0.0	0.0	-	0.2	-	-
Mean	-	-	1.00	55.3	24.4	9.41	0.97	0.00	0.03	0.17	-	-
Per sq. mi.	-	-	0.003	0.183	0.081	0.031	0.003	0.000	0.000	0.001	-	-
Acre-feet	-	-	61	3,290	1,500	560	6.0	0.2	2.0	10	-	-

The Period.....Discharge: Daily - Maximum 14 April 113
 (245 days) - Minimum at various times, 0.0

Mean 11.2; Per Square Mile 0.037

Runoff: Acre-feet 5,430; Depth in inches on drainage area 0.34

b - Ice conditions 1 March to 13 April.

e - Estimated.

Location: Lat. 53° 08', long. 104° 01', in SW. 1/4 sec. 17, tp. 48, rge. 14, W. 2nd Mer., Saskatchewan, at Highway No. 35 crossing, two and one-half miles north of Armley and about fifteen miles south of Nipawin. Drainage Area: 1,485 square miles. Gauge: Wire-weight. Measurement of Discharge: From bridge or by wading. Period of Record: March to October, 1955 to date. Extremes Recorded: Daily - Maximum, 26 April 1957, 10,850 cfs (estimated), Minimum, Nil at various times; Instantaneous Maximum - 6 p.m., 26 April 1957, 11,000 cfs (estimated). Remarks: Records fair.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	0b	8	168	13.3	0.7	0.2	0.3	0.1	-	-
2.....	-	-	1	30	156	11.1	0.7	0.2	0.2	0.1	-	-
3.....	-	-	1	242	137	12.3	1.0	0.2	0.1	0.1	-	-
4.....	-	-	1	532	121	13.6	0.9	0.2	0.1	0.1	-	-
5.....	-	-	1	1,250	110	10.4	1.4	0.1	0.1	0.2	-	-
6.....	-	-	1	1,870	101	5.4	0.9	0.2	0.0	0.2	-	-
7.....	-	-	1	2,150	95	5.7	0.6	0.1	0.1	0.2	-	-
8.....	-	-	1	1,880	90	5.0	0.6	0.2	0.0	0.8	-	-
9.....	-	-	1	1,580b	98	3.0	0.4	0.1	0.0	1.4	-	-
10.....	-	-	1	1,360	82	1.8	0.7	0.0	0.0	1.4	-	-
11.....	-	-	1	1,250	79	2.8	0.6	0.0	0.0	1.0	-	-
12.....	-	-	1	1,170	76	3.2	0.2	0.0	0.0	0.8	-	-
13.....	-	-	2	1,110	66	3.4	0.5	0.0	0.1	0.8	-	-
14.....	-	-	1	1,040	59	2.7	0.4	0.0	0.4	0.8	-	-
15.....	-	-	1	942	56	2.2	0.4	0.0	0.8	0.7	-	-
16.....	-	-	1	817	54e	2.6	0.4	0.0	0.5	0.7	-	-
17.....	-	-	1	746	52e	2.6	0.5	0.0	0.2	0.9	-	-
18.....	-	-	2	679	50	2.8	0.4	0.0	0.4	0.7	-	-
19.....	-	-	1	744	48.2	3.0	0.4	0.0	0.2	0.8	-	-
20.....	-	-	1	726	45.9	2.2	0.3	0.0	0.2	0.9	-	-
21.....	-	-	2	644	40.8	2.2	0.4	0.0	0.1	0.8	-	-
22.....	-	-	1	550	36.8	2.5	0.3	0.0	0.1	0.7	-	-
23.....	-	-	2	488	36.8	1.4	0.4	0.0	0.1	0.7	-	-
24.....	-	-	1	432	51	0.8	0.4	0.0	0.0	0.7	-	-
25.....	-	-	2	361	31.7	0.8	0.4	0.0	0.0	0.8	-	-
26.....	-	-	2	316	26.3	0.8	0.3	0.0	0.0	0.7	-	-
27.....	-	-	2	284	21.3	1.1	0.2	0.2	0.0	0.7	-	-
28.....	-	-	3	231	18.3	0.9	0.4	0.1	0.0	0.6	-	-
29.....	-	-	3	204	14.7	1.1	0.2	0.1	0.0	0.6	-	-
30.....	-	-	4	188	12.7	0.7	0.0	0.1	0.2	0.6	-	-
31.....	-	-	8	-	13.3	-	0.1	0.2	-	1.0	-	-
Mean	-	-	1.65	794	66.1	4.05	0.49	0.07	0.14	0.66	-	-
Per sq. mi.	-	-	0.001	0.535	0.045	0.003	0.000	0.000	0.000	0.000	-	-
Acre-feet	-	-	101	47,250	4,060	241	30	4.4	8.3	41	-	-

The Period.....Discharge: Daily - Maximum 7 April, 2,150
 (245 days) - Minimum at various times, 0.0
 Instantaneous Maximum 8:20 a.m., 7 April, 2,200
 Mean 106.5; Per Square Mile 0.072
 Runoff: Acre-feet 51,740; Depth in inches on drainage area 0.653

b - Ice conditions 1 March to 9 April.
 Gauge heights from graph of observed readings 2 to 14 April.

e - Estimated.

Location: Lat. 53° 25', long. 103° 08', in SE. 1/4 sec. 20, tp. 51, rge. 8, W. 2nd Mer., Saskatchewan, near Co-op Farm, three and one-half miles north of Smoky Burn P.O. and about forty miles east of Nipawin. Drainage Area: 3,287 square miles. Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: March to October, 1955 to date. Recorder established in 1957 to replace former wire-weight gauge. Extremes Recorded: Daily - Maximum, 27 April 1957, 24,560 cfs, Minimum, 13 August 1955, 1.4 cfs; Instantaneous Maximum, 9 p.m., 26 April 1957, 25,860 cfs. Remarks: Records fair.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	4 ^b	138x	528	161	43.5	25.2	19.8	60	-	-
2.....	-	-	4	256	489	181	46.9	27.0	19.8	56	-	-
3.....	-	-	4	1,660	481	177	42.4	25.2	19.8	53	-	-
4.....	-	-	4	3,860	457	181	42.4	23.4	18.9	49.3	-	-
5.....	-	-	6	4,660	428	186	40.1	19.8	18.0	51	-	-
6.....	-	-	7	5,850	385	177	37.8	18.0	17.2	52	-	-
7.....	-	-	8	6,270 ^b	359	157	40.1	15.6	20.7	51	-	-
8.....	-	-	10	5,410	333	142	45.7	14.8	21.6	48.0	-	-
9.....	-	-	11	5,290	320	128	45.7	13.1	21.6	53	-	-
10.....	-	-	12	5,130	308	122	42.4	11.5	19.8	57	-	-
11.....	-	-	12	4,380	285	113	39.0	13.1	18.0	101	-	-
12.....	-	-	12	3,260	285	104	34.8	9.9	17.2	138	-	-
13.....	-	-	12	2,460	262	94	32.8	9.4	20.7	128	-	-
14.....	-	-	12	2,110	247	90	31.8	8.2	18.9	110	-	-
15.....	-	-	12	1,880	242	80	30.9	8.2	18.0	96	-	-
16.....	-	-	12	1,680	232	75	28.9	8.2	18.0	99	-	-
17.....	-	-	12	1,500	203	70	39.0	7.7	45.7	110	-	-
18.....	-	-	12	1,430	190	66	52	7.7	53	110	-	-
19.....	-	-	12	1,500	186	63	52	7.2	45.7	107	-	-
20.....	-	-	12	1,660	172	60	51	6.6	45.7	99	-	-
21.....	-	-	12	1,730	157	58	46.9	6.6	42.4	92	-	-
22.....	-	-	12	1,580	146	60	42.4	6.6	94	80	-	-
23.....	-	-	12	1,330	146	58	39.0	7.2	168	75	-	-
24.....	-	-	12	1,110	135	53	34.8	7.2	146	70	-	-
25.....	-	-	12	971	122	49.3	31.8	7.2	116	64	-	-
26.....	-	-	22	848	113	49.3	27.0	7.7	107	61	-	-
27.....	-	-	33	726	110	48.0	26.1	7.2	99	57	-	-
28.....	-	-	44	655	113	48.0	22.5	6.6	87	54	-	-
29.....	-	-	56	586	107	46.9	21.6	7.7	78	53	-	-
30.....	-	-	68	553	104	44.6	22.5	10.7	71	53	-	-
31.....	-	-	103	-	113	-	22.5	15.6	-	52	-	-
Mean	-	-	18.6	2,173	250	98.1	37.3	11.9	50.2	75.5	-	-
Per sq. mi.	-	-	0.006	0.661	0.076	0.030	0.011	0.004	0.015	0.023	-	-
Acre-feet	-	-	1,140	129,300	15,390	5,840	2,290	734	2,990	4,640	-	-

The Period.....Discharge: Daily - Maximum 7 April, 6,270
(7245 days) - Minimum 1 to 4 March, 4

Instantaneous Maximum 10 p.m., 6 April, 7,670
Mean 334; Per Square Mile 0.102

Runoff: Acre-feet 162,300; Depth in inches on drainage area 0.93

b - Ice conditions 1 March to 7 April.

x - Cantilever gauge readings 1 March to 1 April.

OLDMAN RIVER NEAR WALDRON'S CORNER - STATION No. 5AA23

Location: Lat. 49° 48' 50", long. 114° 11' 00", in NE. 1/4 sec. 10, tp. 10, rge. 2, W. 5th Mer., Alberta, about eighteen miles by road north of Lundbreck and about twenty miles above confluence with Crownsnest River. Drainage Area: 551 square miles (revised). Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: October 1949 to date. Average Discharge: (9 years) - 528 cfs. Extremes Recorded: Daily - Maximum, 9 June 1953, 11,850 cfs, Minimum, 18 January 1950, 39 cfs; Instantaneous Maximum - 11 p.m., 8 June 1953, 16,000 cfs (by slope-area determination). Remarks: Records excellent during open-water periods and fair during ice period.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	107	130	86	91	92	62	210	274	1,290	678	569	196
2.....	107	118	87	91	91	56	240	448	1,290	686	534	209
3.....	113	113	88	91	89	56	244	591	1,240	630	506	223
4.....	124	158	89	91	86	56	248	719	1,380	599	474	209
5.....	118	151	89	91	84	56	271	806	1,370	638	448	196
6.....	118	136	90	91	82	56	294	944	1,300	1,160	411	187
7.....	115	136	90	91	79	56	300	1,050	1,340	1,490	381	181
8.....	104	139	91	91	79	56	280	1,340	1,290	1,450	364	184
9.....	113	121	91	91	79	56	200b	1,660	1,200	1,390	342	184
10.....	115	121	91	91	77	56	126	1,690	1,520	1,280	316	178
11.....	115	121	91	92	76	56	126e	1,860	1,470	1,240	307	175
12.....	113	110	91	92	74	56	126e	2,360	1,450	1,340	332	178
13.....	118	104	91	92	74	56	126x	2,260	1,330	1,650	307	184
14.....	127	99	91	93	74	56	194e	1,900	1,260	1,670	288	184
15.....	127	94x	91	94	76	56	262	1,860	1,200	1,560	274	178
16.....	124	86	91	94	77	56	223	2,120	1,110	1,440	266	172
17.....	118	79	91	94	78	56	187	2,160	1,020	1,540	253	167
18.....	118	76	91	94	79	56	187	1,940	991	1,370	245	167
19.....	121	72x	91	94	81	56	175	1,860	1,040	1,250	249	187
20.....	110	72	91	94	82	56	172	2,000	1,180	1,120	253	253
21.....	108	73	91	94	84	56	172	2,230	1,100	1,010	241	202
22.....	113	74	91	94	84	56	169	2,160	1,040	934	234	196
23.....	113	76	91	94	84	56	159	2,120	962	1,230	234	187
24.....	115	79	91	94	81	58	151	2,050	924	982	226	184
25.....	142	80	91	94	77	59	159	2,000	851	879	216	178
26.....	139	80	91	94	74	61	154	1,900	798	851	206	175
27.....	121	81	91	94	70	76	137	1,750	780	789	212	172
28.....	104	82	91	94	67	91	146	1,650	897	771	230	169
29.....	124	84	91	94	-	120	146	1,570	771	745	220	169
30.....	127	85	91	94	-	150	181	1,490	711	719	209	169
31.....	118	-	91	94	-	179	-	1,360	-	638	202	-
Mean	118	101	90.4	92.8	79.6	67.4	192	1,617	1,137	1,088	308	186
Per sq. mi.	0.21	0.18	0.16	0.17	0.14	0.12	0.35	2.93	2.06	1.97	0.56	0.34
Acre-feet	7,240	6,010	5,560	5,710	4,420	4,140	11,430	99,420	67,650	66,900	18,940	11,090

The Year.....Discharge: Daily - Maximum 12 May. 2,360
- Minimum 2 to 23 March, 56
Instantaneous Maximum 9 p.m., 12 May, 2,820
Mean 426; Per Square Mile 0.77
Runoff: Acre-feet 308,500; Depth in inches on drainage area 10.50

b - Ice conditions 15 November to 9 April. e - Estimated.
x - Manual gauge readings 15 November to 13 April.

OLDMAN RIVER NEAR MONARCH - STATION No. 5AD₁₉

Location: Lat. 49° 47' long. 113° 07', in SE. 1/4 sec. 1, tp. 10, rge. 24, W. 4th Mer., Alberta, about sixteen miles below confluence with Willow Creek and five miles above confluence with Belly River. Drainage Area: 3,450 square miles (revised). Gauge: Wire-weight. Measurement of Discharge: From bridge or by wading. Period of Record: October 1948 to date. Average Discharge: (10 years) - 1,785 cfs. Extremes Recorded: Daily - Maximum, 10 June 1953, 54,620 cfs, Minimum, 3 October 1957, 16.4 cfs; Instantaneous Maximum - 8:30 p.m., 9 June 1953, 67,450 cfs. Revisions: 1949, W.R.P. 117. Remarks: Records fair. Discharge is affected by diversion to irrigation projects upstream.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	35.0	1,190	268	226	199	416	1,580	1,030	4,180	2,010	1,790	396
2.....	17.0	790	215	194	189	445	1,720	1,400	3,990	1,980	1,340	591
3.....	16.4	599	315	204	210	363	1,190	3,020	4,010	2,320	1,180	583
4.....	72	608	215	189	210	344	1,130	3,000	4,050	2,440	1,180	607
5.....	78	581	385	194	184	370	1,030	3,020	3,850	2,410	1,010	430
6.....	100	545	364	194	189	396	1,170	4,290	3,700	1,580	988	438
7.....	92	671	385	189	194	231	1,260	4,540	3,660	3,040	892	512
8.....	141	599	343	194	184	242	1,340	4,700	3,960	3,620	934	535
9.....	111	617	364	204	184	237	1,870	4,900	3,940	3,660	693	459
10.....	141	635	385	215	189	254	2,040	6,000	4,250	3,530	862	504
11.....	146	590	399	226	178	194	1,610	6,080	4,970	2,640	591	535
12.....	154	563	385	265	194	178	1,450	7,250	4,810	2,670	550	542
13.....	107	509	357	265	194	337	1,610	9,630	4,450	2,800	558	259
14.....	238	572	385	319	194	288	1,640	9,400	4,340	3,360	535	125
15.....	150	581	357	402	184	303	2,750b	7,220	4,120	3,260	519	121
16.....	141	554	364	306	168	350	1,490	6,920	3,740	3,410	519	142
17.....	146	287	294	370	184	331	1,660	7,150	3,570	3,380	535	151
18.....	136	392	270	331	248	356	1,490	7,200	3,450	3,530	466	138
19.....	154	653b	259	294	276	270	1,400	7,150	3,260	2,730	402	155
20.....	78	692	237	300	313	232	1,400	6,240	3,380	2,220	481	97
21.....	484	730	265	306	306	389	1,510	6,510	3,450	2,010	519	109
22.....	492	830	276	226	300	542	1,470	6,850	3,490	1,670	512	288
23.....	343	608	259	270	276	459	1,490	6,820	2,960	1,780	527	430
24.....	413	840	254	248	265	488	1,280	6,510	2,480	1,870	535	445
25.....	452	399	210	231	306	438	1,310	6,100	1,980	1,850	519	459
26.....	476	527	259	210	379	488	1,300	6,120	2,200	1,420	504	294
27.....	484	308	232	215	452	488	1,090	6,170	1,720	1,480	430	297e
28.....	484	350	210	199	423	467	822	5,320	1,880	1,510	452	300
29.....	392	268	242	204	-	719	747	5,180	2,310	1,730	402	237
30.....	1,140	329	210	189	-	1,200	775	4,490	2,150	1,880	466	194
31.....	1,100	-	232	210	-	1,180	-	4,320	-	1,820	396	-
Mean	275	581	297	245	242	419	1,421	5,630	3,510	2,439	687	346
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	16,890	34,550	18,240	15,050	13,430	25,780	84,540	346,200	208,900	150,000	42,220	20,570

The Year.....Discharge: Daily - Maximum 13 May, 9,630
 - Minimum 3 October, 16.4
 Mean 1,349
 Runoff: Acre-feet 976,400

b - Ice conditions 19 November to 15 April.

e - Estimated.

Location: Lat. 49° 42', long. 112° 52', in NW. 1/4 sec. 1, tp. 9, rge. 22, W. 4th Mer., Alberta, at traffic bridge about eight miles downstream from confluence with St. Mary River. Drainage Area: 6,630 square miles (revised). Gauge: Wire-weight. Measurement of Discharge: From bridge or by wading. Period of Record: September 1911 to September 1931, May 1932 to September 1948 and September 1957 to date; miscellaneous measurements in 1911 and some data in 1953. Prior to 1957, records were obtained at site of former traffic bridge about one hundred yards downstream from present site. Prior to 1915, records were published under the title "Belly River near Lethbridge". Average Discharge: (35 years) - 3,297 cfs. Extremes Recorded: Daily - Maximum, 10 June 1953, 135,000 cfs, Minimum, 31 August 1936 and 12 October 1936, 134 cfs; Instantaneous Maximum - 2 a.m., 10 June 1953, 149,000 cfs (by slope-area measurement). Revisions: Drainage area, 1917 Report; the August 1920 mean discharge was published in error in W.R.P. 31 and should be 2,075 cfs; April 1926, August 1943 and October 1947 monthly discharges have been corrected to 2,530, 1,170 and 4,220 cfs. Remarks: Records good during open-water periods and fair during ice periods. It is reported that the flood of 1908 reached a gauge height of 26.7 feet and a corresponding discharge of about 200,000 cfs. Discharge is affected by upstream storage and diversion to irrigation projects.

Daily Discharge in Cubic Feet per Second for Water Year 1956-57

Day	September	Day	September	Day	September
1.....	} 400e	11.....	509	21.....	519
2.....		12.....	303	22.....	504
3.....		13.....	616	23.....	454
4.....		14.....	338	24.....	439
5.....		15.....	319	25.....	478
6.....	402	16.....	514	26.....	519
7.....	351	17.....	380	27.....	627
8.....	288	18.....	796	28.....	611
9.....	288	19.....	459	29.....	631e
10.....	342	20.....	509	30.....	651

The Period.....Discharge: Daily - Maximum 30 September, 651
(30 days) - Minimum 8 September, 288

Mean 462

Runoff: Acre-feet 27,470

e - Estimated.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	663	3,370	633	514	338	844	4,740	2,140	9,460	5,840	3,010	1,040
2.....	639	3,240	633	367	334	856	4,280	2,880	8,650	5,490	2,730	994
3.....	622	2,630	1,110	376	444	825	3,490	3,810	8,300	5,080	2,470	952
4.....	706	2,130	994e	351	459	832	4,010	4,620	8,020	4,840	2,000	961
5.....	752	2,130	879	498e	363	810	4,760	5,360	9,320	4,550	2,120	936
6.....	817	2,130	759	645	318	792e	5,920	5,620	9,900	4,410	2,020	911
7.....	856	2,120	733	645	277	774	4,860	6,190	9,180	6,440	1,840	879
8.....	872	1,920	896e	766	227	724e	4,440	7,000	8,860	6,690	1,740	817
9.....	879	1,900	1,060	687	252	675	4,370	8,160	8,300	6,500	1,650	796
10.....	864	1,970	693	540	227	739	4,620	9,870	7,960	5,760	1,640	766
11.....	848	1,780	706	566	322	713	4,320	11,600	10,790	5,520	1,520	719
12.....	796	1,920	911	611b	359	693	4,410e	12,000	13,680	4,980	1,530	663
13.....	832	1,920	622	514	338	509	4,500	14,140	14,030	5,210	1,500	651
14.....	919	1,840b	693	394	250	599	5,810	14,690	13,010	5,860	1,420	633
15.....	994	1,750	633	376	311	488	6,160	12,530	11,940	5,520	1,230	639
16.....	1,030	1,680	605	566	330	334	6,860	11,840	11,120	5,520	1,250	639
17.....	1,050	1,350	872	577	322	449	3,630	11,690	11,510	5,080	1,290	599
18.....	1,050	1,060	639	545	398	561	3,140	11,540	8,740	4,910	1,180	545
19.....	1,330	1,310	550	522	435	588	2,940	11,540	7,140	4,690	1,150	572
20.....	1,480	1,250	572	498	493	545	2,720e	10,910	8,570	4,210	1,070	583
21.....	1,570	810	498	459	509	583	2,500	10,940	9,730	3,770	1,150	622
22.....	1,240b	1,140b	610	463	566	594	2,340	11,750	9,230	3,450	1,170	817
23.....	911	1,470	645	439	693	796	2,550	11,940	8,600	3,410	1,080	872
24.....	1,110	1,820	407	556	739b	739	2,360	12,190	7,750	3,390	1,050	944
25.....	1,240	2,010	693	509	994	733	2,320	12,310	7,030	3,840	1,130	1,020
26.....	1,450	1,480e	550e	483	880e	817	2,050	12,190	6,860	3,350	1,050	936
27.....	2,190	953e	407	493	766	1,160	2,180	11,810	6,500	3,240	994	864
28.....	1,950b	425	240	545	832	1,250	2,020	11,150	6,380	3,120	1,080	810
29.....	2,020	473	310e	483	-	2,310e	1,960	10,550	6,380	3,330	1,110	774
30.....	1,950	633	380	483	-	3,370	2,050	10,370	6,380	3,180	1,080	752
31.....	2,000	-	657	439	-	4,050	-	9,900	-	3,490	1,080	-
Mean	1,148	1,687	664	513	458	960	3,744	9,782	9,111	4,667	1,495	790
Acre-feet	70,610	100,400	40,840	31,560	25,440	59,010	222,800	601,400	542,100	286,900	91,900	47,020

The Year.....Discharge: Daily - Maximum 14 May, 14,690
- Minimum 8 February, 227

Mean 2,928

Runoff: Acre-feet 2,120,000

b - Ice conditions 22 to 28 October, 14 to 22 November and 12 January to 24 February.
Gauge heights from graph of observed readings 1 May to 30 June.

e - Estimated.

Location: Lat. 49° 35' 30", long. 114° 24' 30" (corrected), in NW, 1/4 sec. 30, tp. 7, rge. 3, W. 5th Mer., Alberta, about five hundred yards south of Canadian Pacific Railway depot. Drainage Area: 162 square miles (revised). Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: July to October 1910; continuous January 1911 to March 1920 and mainly March to October, 1949 to date. Prior to 1949, records were obtained from staff gauge about one-half mile upstream. Average Discharge: (9 years) - 187 cfs. Extremes Recorded: Daily - Maximum, 9 June 1953, 2,320 cfs, Minimum, 29 March 1917 and 11 to 17 December 1919, 21 cfs; Instantaneous Maximum - 12:30 a.m., 9 June 1953, 2,610 cfs. Revisions: Drainage area, 1917 Report; 1911, 1912, W.R.P. 117; August 1957 mean discharge was published in error in W.R.P. 121 and should be 82.7 cfs. Remarks: Records good.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	60e	47.6	120	449	188	134	81	69	-	-
2.....	-	-	60x	47.6	185	417	188	132	81	69	-	-
3.....	-	-	54e	47.6	254	400	185	132	81	69	-	-
4.....	-	-	48.8	50	305	400	191	127	79	67	-	-
5.....	-	-	42.0	54	335	393	194	124	77	67	-	-
6.....	-	-	38.1	53	383	386	305	122	75	67	-	-
7.....	-	-	60x	51	445	396	349	118	77	69	-	-
8.....	-	-	53.6e	51	536	383	345	115	71	73	-	-
9.....	-	-	47.1e	53	637	383	315	113	73	71	-	-
10.....	-	-	40.6e	51	704	424	292	111	73	71	-	-
11.....	-	-	34.2x	53	694	424	270	111	71	69	-	-
12.....	-	-	32.0e	56	901	410	267	113	71	71	-	-
13.....	-	-	29.8e	62	916	386	283	109	79	67	-	-
14.....	-	-	27.6x	94	754	366	267	104	73	67	-	-
15.....	-	-	34.3e	102	712	349	248	102	69	64	-	-
16.....	-	-	40.9e	94	777	335	233	100	69	64	-	-
17.....	-	-	47.6x	90	767	318	230	98	69	64	-	-
18.....	-	-	46.7e	92	704	315	218	98	69	69	-	-
19.....	-	-	45.8e	88	663	315	209	98	79	81	-	-
20.....	-	-	45.0e	85	686	322	200	98	83	79	-	-
21.....	-	-	44.1	88	735	305	191	96	79	77	-	-
22.....	-	-	40.0	90	726	296	182	94	77	75	-	-
23.....	-	-	42.0	85	704	283	191	92	75	73	-	-
24.....	-	-	42.0	81	690	280	173	92	73	71	-	-
25.....	-	-	42.0	83	672	264	167	88	73	69	-	-
26.....	-	-	44.1	83	628	245	164	83	71	71	-	-
27.....	-	-	45.2	81	586	248	157	85	71	69	-	-
28.....	-	-	45.2	81	552	239	157	94	69	67	-	-
29.....	-	-	45.2	81	548	206	152	90	69	69	-	-
30.....	-	-	46.4	90	512	191	152	85	69	67	-	-
31.....	-	-	46.4	-	570	-	144	83	-	66	-	-
Mean	-	-	44.2e	72.2	594	338	220	105	74.2	69.7	-	-
Per sq. mi.	-	-	0.27	0.45	3.67	2.09	1.36	0.65	0.46	0.43	-	-
Acre-feet	-	-	2,720	4,290	36,500	20,090	13,500	6,430	4,420	4,290	-	-

The Period.....Discharge: Daily - Maximum 13 May, 916
 (245 days) Minimum 14 March, 27.6
 Instantaneous Maximum 8 p.m., 12 May, 1,080
 Mean 190; Per Square Mile 1.17
 Runoff: Acre-feet 92,240; Depth in inches on drainage area 10.67

e - Estimated.

x - Staff gauge readings.

Location: Lat. 49° 29' 20", long. 114° 08' 40", in NW. 1/4 sec. 24, tp. 6, rge. 2, W. 5th Mer., Alberta, near Beaver Mines and about fifteen miles above confluence with Oldman River. Drainage Area: 319 square miles (revised). Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: February 1945 to December 1949 and April 1950 to date. Prior to 1950, records were obtained from wire-weight gauge about one mile downstream. Average Discharge: (12 years) - 625 cfs. Extremes Recorded: Daily - Maximum, 23 May 1948, 12,780 cfs, Minimum, 19 to 21 January 1953, 36 cfs. Revisions: 1947 revised data can be obtained upon application to the District Engineer at Calgary, for address see page 8; 1948, W.R.P. 121. Remarks: Records excellent during open-water periods and fair during ice period.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	112	395	186	206	90	90	119	684	2,060	634	279	134
2.....	116	348	196	231	90	107	121	990	1,880	629	269	139
3.....	135	302	175	204	92	94	119	1,410	1,810	592	256	139
4.....	133	299	144	132	103	120	134	1,760	2,190	558	247	132
5.....	122	282	140	110	99	108	146	1,920	2,340	533	237	125
6.....	120	272	128	89	99	92	136	2,140	2,080	917	228	123
7.....	122	260	134	82	89	103	141	2,460	1,930	981	219	119
8.....	122	231	168	110	105	103	160	2,970	1,780	799	210	117
9.....	118	239	140	116	116	94	170	3,560	1,770	732	204	115
10.....	124	236	120	103	103	90	173	4,090	2,750	738	201	113
11.....	133	228	108	99	89	87	189	4,010	2,520	656	201	111
12.....	139	219	142	94	84	84	231	4,410	2,300	618	201	113
13.....	148	217	122	108	74	84	335	4,130	1,980	624	189	109
14.....	161	211	118	142	64	85	543	3,230	1,730	603	181	111
15.....	165	204	103	120	70	87	519	2,890	1,570	567	178	108
16.....	156	196	130	94	70	89	514	3,210	1,440	519	173	106
17.....	154	170	136	94	67	89	514	3,340	1,340	495	165	106
18.....	172	181	118	94	64	105	562	3,040	1,260	468	160	104
19.....	186	181	112	96	64	114	519	2,830	1,330	446	160	123
20.....	170	154	108	105	74	94	514	2,960	1,410	434	163	150
21.....	168	140b	108	118	51	92	533	3,410	1,200	405	158	119
22.....	124	170	108	105	62	90	514	3,560	1,070	393	155	119
23.....	139	206	99	112	80	94	468	3,530	1,000	451	153	119
24.....	194	180	130	99	92	96b	426	3,480	945	405	148	121
25.....	191	163	150	103	105	104	409	3,380	868	378	143	119
26.....	186	157	124	99	103	106	397	3,250	792	366	139	117
27.....	174	140	118	97	94	108	370	3,060	852	351	139	113
28.....	170	159	146	87	99	111	370	2,860	868	339	148	111
29.....	172	132	132	90	-	113	374	2,890	738	324	148	111
30.....	354	128	138	87	-	115	473	2,590	673	324	141	111
31.....	490	-	154	94	-	117	-	2,260	-	296	136	-
Mean	167	213	133	114	85.4	98.9	340	2,913	1,549	535	185	119
Per sq. mi.	0.52	0.67	0.42	0.36	0.27	0.31	1.07	9.13	4.86	1.68	0.58	0.37
Acre-feet	10,250	12,690	8,200	6,980	4,740	6,080	20,220	179,100	92,180	32,880	11,360	7,060

The Year.....Discharge: Daily - Maximum 12 May, 4,410
 - Minimum 21 February, 51
 Instantaneous Maximum 9 p.m., 12 May, 5,090
 Mean 541; Per Square Mile 1.70
 Runoff: Acre-feet 391,700; Depth in inches on drainage area 23.03

b - Ice conditions 21 November to 24 March.

WILLOW CREEK NEAR CLARESHOLM - STATION No. 5AB₂₁

Location: Lat. 50° 01' 05", long. 113° 42' 50", in NE, 1/4 sec. 23, tp. 12, rge. 28, W. 4th Mer., Alberta, about five miles above confluence with Trout Creek and six miles west of Claresholm. Drainage Area: 446 square miles (revised). Gauge: Wire-weight. Measurement of Discharge: From bridge or by wading. Period of Record: August to October 1908 and January 1944 to date. Records for 1908 were published under the title "near New Oxley". Average Discharge: (14 years) - 152 cfs. Extremes Recorded: Daily - Maximum, 9 June 1953, 8,250 cfs, Minimum, 13 February 1950, 0.5 cfs; Instantaneous Maximum - 6 a.m., 9 June 1953, 10,000 cfs (estimated). Remarks: Records good during open-water periods and fair during ice period.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	22.5	98	26	8	9	18	407b	532	237	218	250	58
2.....	21.5	49.2	27	9	10	24	418	698	302	218	216	54
3.....	23.4	21.1	24	8	9	20	253	521	293	186	194	60
4.....	26.4	42.1	27	9	9	18	253	514	256	166	180	61
5.....	31.7	28.1	25	9	8	17	425	483	378	203	162	61
6.....	33.2	42.1	20	9	8	14	472	466	299	224	156	51
7.....	31.7	18.6	21	10	10	16	411	483	261	538	148	47.8
8.....	30.3	27.0	22	10	7	16	560	486	234	411	142	46.8
9.....	29.2	24.8	23	10	9	15	743	546	208	385	134	44.6
10.....	28.1	31.7	20	10	7	16	486	535	201	323	123	37.4
11.....	29.8	39.7	19	11	9	17	552	500	253	392	112	40.3
12.....	33.2	25.9	22	13	8	17	690	486	267	438	110	42.4
13.....	37.7	34.7	22	11	7	18	840	585	284	570	109	46.8
14.....	36.2	32.4	20	9	7	15	975	479	250	578	102	72
15.....	37.7	32b	15	10	5	14	542	432	270	476	92	68
16.....	39.7	27	14	12	5	16	483	402	245	405	83	61
17.....	38.5	31	13	12	4	16	352	398	218	496	81	45.7
18.....	44.4	19	14	13	7	17	290	378	229	405	75	41.4
19.....	37.7	23	13	9	4	19	245	342	290	336	72	37.4
20.....	39.7	25	15	11	5	19	194	320	472	305	78	36.4
21.....	40.9	21	13	11	6	19	180	320	372	267	72	35.5
22.....	15.8	22	12	11	15	23	211	308	326	250	75	36.4
23.....	16.5	26	10	11	17	36	154	296	276	472	87	36.4
24.....	21.5	31	10	11	13	30	152	287	242	378	72	37.4
25.....	29.8	32	11	11	38	26	134	261	216	267	63	37.4
26.....	30.9	38	12	10	27	30	142	239	191	248	65	32.8
27.....	38.5	35	10	10	29	210	127	218	175	248	62	30.0
28.....	42.1	13	11	11	16	203	118	196	218	234	75	31.8
29.....	48.1	17	10	9	-	147	123	182	208	542	75	29.3
30.....	61	26	11	11	-	205	213	184	189	514	71	30.9
31.....	73	-	9	10	-	337	-	189	-	333	62	-
Mean	34.5	31.1	16.8	10.3	11.0	51.9	372	396	262	355	110	45.0
Per sq. mi.	0.08	0.08	0.04	0.03	0.03	0.12	0.83	0.89	0.59	0.80	0.25	0.10
Acre-feet	2,120	1,850	1,030	633	611	3,190	22,110	24,330	15,590	21,850	6,740	2,680

The Year.....Discharge: Daily - Maximum 14 April, 975
 - Minimum 17 and 19 February, 4
 Mean 142; Per Square Mile 0.32
 Runoff: Acre-feet 102,700; Depth in inches on drainage area 4.32

b - Ice conditions 15 November to 1 April.

Location: Lat. 49° 47' 40", long. 113° 31' 30", (corrected), in NW. 1/4 sec. 6, tp. 10, rge. 26, W. 4th Mer., Alberta, about twelve miles by creek above confluence with Oldman River and five miles south of Granum. Drainage Area: 900 square miles (revised). Gauge: Wire-weight. Measurement of Discharge: From bridge or by wading. Period of Record: Part-year records, 1909 to 1915 and 1924; continuous January 1916 to October 1923; March to October, 1942 to date. Records were obtained in SE. 1/4 sec. 26, tp. 9 from July 1909 to August 1915 and in NE. 1/4 sec. 20, tp. 9 from August 1915 to April 1923 and published under the title "near MacLeod". Records were obtained in SW. 1/4 sec. 6, tp. 10 from April 1923 to April 1924 and published under the title "near Granum". Average Discharge: (8 years)-181 cfs. Extremes Recorded: Daily - Maximum, 9 June 1953, 14,690 cfs, Minimum, Nil at various times; Instantaneous Maximum - 10 a.m., 9 June 1953, 20,920 cfs (by slope-area determination). Revisions: May 1916 mean discharge has been corrected to 321 cfs; June 1923 mean discharge and runoff have been corrected to 2,243 cfs and 133,468 acre-feet; total runoff for water year 1922-23 has been corrected to 213,557 acre-feet; 1942, W.R.P. 117. Remarks: Records fair. Records collected in SW. 1/4 sec. 6, tp. 11 from 1924 to 1931 and 1935 to 1941 and published under title "Willow Creek near Granum" are not considered equivalent to records at this site.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	28b	347b	443e	249e	267	617e	86	42.0	-	-
2.....	-	-	28	586	754	264	273	430e	84	41.2e	-	-
3.....	-	-	34	442	638	264	276	243	75	40.5	-	-
4.....	-	-	40	363	540	307e	254e	240	93	39.0	-	-
5.....	-	-	23	712	544	351e	232	234	87e	39.0	-	-
6.....	-	-	21	920	577	390	289e	219e	82e	39.5e	-	-
7.....	-	-	19	650	603e	304	345e	204e	76e	40.0e	-	-
8.....	-	-	18	1,150	628e	295	502	189	70	40.5	-	-
9.....	-	-	26	1,400	654	270	478	179	55	40.0e	-	-
10.....	-	-	27	771	737	258	430	173	54e	41.5e	-	-
11.....	-	-	23	605	692e	276e	491e	166e	52	42.0	-	-
12.....	-	-	24	675	646	295e	552e	158	57	41.2e	-	-
13.....	-	-	25	1,560	791	313	613	153	67e	40.5	-	-
14.....	-	-	26	1,840	694e	320	646e	145e	76e	40.0e	-	-
15.....	-	-	29	954	597	304	679	136e	86	39.5e	-	-
16.....	-	-	32	555	575e	298e	697e	128	82e	39.0	-	-
17.....	-	-	29	445	553	292	710e	120e	79	38.2e	-	-
18.....	-	-	26	386e	529	273	728	112e	66e	37.5	-	-
19.....	-	-	26	327	500e	323	505	104	52	38.6e	-	-
20.....	-	-	26	251	471	412	430	100	51e	39.8e	-	-
21.....	-	-	27	207	445e	421e	394	102e	49.2e	40.9e	-	-
22.....	-	-	26	214e	419	430	353	104	47.9e	42.0	-	-
23.....	-	-	26	221	395e	367e	394	109	46.5	40.5e	-	-
24.....	-	-	18	201e	370e	304	394	109e	46.5	39.0	-	-
25.....	-	-	57	181	346	286e	376e	109	45.8e	39.0	-	-
26.....	-	-	72	189	323	267	345e	106e	45.0e	39.0	-	-
27.....	-	-	86	168e	314e	261	317	102	44.2e	38.5e	-	-
28.....	-	-	590	148	273	264	320	104	43.5	38.0e	-	-
29.....	-	-	499	140e	240	267	564e	98e	43.5	37.5	-	-
30.....	-	-	363	132	226	264	808	92e	42.8e	37.5e	-	-
31.....	-	-	499	-	234	-	804	86	-	37.5e	-	-
Mean	-	-	90.1	558	508	306	467	167e	62.8e	39.6e	-	-
Per sq. mi.	-	-	0.10	0.62	0.56	0.34	0.52	0.19	0.07	0.04	-	-
Acre-feet	-	-	5,540	33,200	31,240	18,230	28,690	10,260	3,740	2,440	-	-

The Period.... Discharge: Daily - Maximum 14 April, 1,840
 (245 days) - Minimum 8 and 24 March, 18

Mean 274; Per Square Mile 0.30

Runoff: Acre-feet 133,300; Depth in inches on drainage area 2.78

b - Ice conditions 1 March to 1 April.

e - Estimated.

Location: Lat. 50° 07' 50", long. 113° 07' 10", in NW, 1/4 sec. 32, tp. 13, rge. 23, W. 4th Mer., Alberta, below weir immediately west of town of Carmangay and about ten miles above head of Travers Reservoir. Drainage Area: 1,065 square miles. Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: Continuous May 1918 to October 1925; part-year records 1926 to 1931, 1935 and 1936; and March to October, 1955 to date. Records prior to 1955 were obtained by staff gauge near present site. Records from March 1955 to June 1958 were obtained by recorder in SW, 1/4 sec. 32. Average Discharge: (7 years) - 35.1 cfs. Extremes Recorded: Daily - Maximum, 2 April 1958, 2,830 cfs, Minimum, Nil at various times. Remarks: Records poor. Discharge is affected by diversion from the Highwood River at High River via the Little Bow Irrigation District canal.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	8x	262	200e	40.2e	30e	27.2	14.0	16.1	-	-
2.....	-	-	8	2,830x		36.8e		26.3	18.2	16.8	-	-
3.....	-	-	7	2,190x		33.5x		24.6	17.5	16.8	-	-
4.....	-	-	7	2,110e		32.3e		20.6	17.5	16.8	-	-
5.....	-	-	7	2,020 ^e _b		31.0e		18.2	16.8	15.4	-	-
6.....	-	-	6	1,940x	40e	29.8x	25.4	15.4	16.8	16.1	-	-
7.....	-	-	5	1,770				14.7	17.5	15.4	-	-
8.....	-	-	4	1,580				13.3	17.5	14.7	-	-
9.....	-	-	4	1,220				11.5	16.1	14.0	-	-
10.....	-	-	4	995				26.3	10.9	14.7	-	-
11.....	-	-	4	597	100e	40e	31.7	10.3	15.4	14.0	-	-
12.....	-	-	3	603			26.3	16.8	14.0	14.0	-	-
13.....	-	-	3	576			33.5	16.1	14.7	13.3	-	-
14.....	-	-	3	633			40.0	14.7	19.8	14.0	-	-
15.....	-	-	3	656			70	13.3	25.4	14.0	-	-
16.....	-	-	4	472	200e	47.6x	62	13.3	35.3	14.7	-	-
17.....	-	-	4				27.2	52	12.1	26.3	15.4	-
18.....	-	-	4x				28.1	42.0	11.5	24.6	14.7	-
19.....	-	-	4				28.1	35.3	11.5	23.0	13.3	-
20.....	-	-	4				28.1	30.8	12.7	21.4	14.0	-
21.....	-	-	5		129x	60e	27.2	13.3	19.0	12.7	-	-
22.....	-	-	5				26.3	17.5	17.5	13.3	-	-
23.....	-	-	5				35.3	24.6	17.5	14.7	-	-
24.....	-	-	6				109	34.4	17.5	14.7	-	-
25.....	-	-	6				73	19.0	16.8	14.7	-	-
26.....	-	-	6		100e	46.0x	54	16.8	16.1	16.8	-	-
27.....	-	-	8				46.0	19.8	15.4	16.8	-	-
28.....	-	-	21				40.0	16.8	16.8	15.4	-	-
29.....	-	-	66				36.2	18.2	15.4	15.4	-	-
30.....	-	-	243				32.6	15.4	15.4	14.7	-	-
31.....	-	-	249	-	43.5x	-	31.7	14.0	-	14.0	-	-
Mean	-	-	23.1	756e	108e	42.7e	39.6	16.9	18.5	14.9	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	1,420	44,990	6,640	2,540	2,430	1,040	1,100	914	-	-

The Period..... Discharge: Daily - Maximum 2 April, 2,830
(245 days) - Minimum 12 to 15 March, 3

Mean 126

Runoff: Acre-feet 61,070

b - Ice conditions 1 March to 5 April. e - Estimated.
x - Staff gauge readings 1 to 18 March and as indicated.

Location: Lat. 50° 08' 00", long. 112° 40' 10", in NE. 1/4 sec. 33, tp. 13, rge. 20, W. 4th Mer., Alberta, about four miles below Travers Dam, and twenty miles east of Carmangay. Gauge: Tape-weight. Measurement of Discharge: From bridge or by wading. Period of Record: May 1957 to date. Extremes Recorded: Maximum, (Regulated) 31 March 1958, 67 cfs, Minimum, (Regulated) 10 December 1957, 2 cfs. Remarks: Records fair. Discharge completely controlled at Travers Dam.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	16.2	14.8	7	8	8	14	28	17.2	13.5e	22.3	10.7	10.0e
2.....	16.2	14.8	7	7	9	16	16b	17.2	13.5e	22.3	10.4e	10.2e
3.....	16.2	15.2e	8	8	10	18	24.8	17.2	13.5	23.0e	10.1e	10.4
4.....	16.7	15.7	8	23	12	20	28.4	16.8	13.2	23.8	9.8e	10.4
5.....	15.3	4.7	3	15	13	22	25.8	16.8	13.5	22.8	9.6	7.3
6.....	15.3	2.2	11	7	13	40	33.8	16.8	13.9	19.6	9.3	7.8
7.....	16.2	14.9e	10	8	14	22	37.8	16.8	15.4e	22.3	8.8	8.5
8.....	15.7	27.6	8	7	14	18	38.4	16.4	16.8	20.0	7.8	9.8
9.....	14.8	28.4	7	7	15	14	47.0	16.4	16.3e	13.9	7.6	9.6e
10.....	15.3	13.9	2	6	15	10	40.8	16.1	15.8e	4.4	7.4e	9.3
11.....	14.8	13.5	19	9	12	28	39.6	16.1	15.4e	11.9	7.1	9.3
12.....	14.8	13.9	12	12	13	23	26.8	16.4	14.9	12.2	8.8	8.0
13.....	15.3	23.3e	8	15	16	40	25.8	16.1	13.9	10.8e	7.6	6.8e
14.....	15.7	32.7e	9	18	19	44	26.3	15.3	15.3	9.3	8.5	5.6
15.....	15.7	42b	16	16	19	32	25.3	14.9	13.2	10.2e	8.6e	5.1
16.....	16.2	21	23	14	19	30	24.8	14.6	13.9	11.0	8.8	5.6e
17.....	16.2	18	9	14	19	29	24.3	14.6	13.9	11.0	8.5	6.2e
18.....	16.2	16	4	12	15	28	25.3	14.0e	15.3	9.8	11.6	6.7
19.....	15.7	18	3	10	16	26	24.8	13.5	14.9	11.3	11.3	4.0
20.....	16.7	15	12	9	17	24	26.8	13.7e	15.3	12.6	6.9	5.4
21.....	16.7	3	12	9	16	22	26.6e	13.9	16.0e	12.6	8.0	7.6
22.....	17b	28	12	9	16	20	26.3e	13.2	16.8	13.4e	8.0e	7.3
23.....	17	16	12	9	15	19	26.0e	12.6	18.8	14.2	8.0	6.7
24.....	15	12	12	9	15	17	25.8	12.2	18.2e	10.4	9.4e	7.3
25.....	16	8	12	9	14	15	25.3	12.6	19.6	11.3	10.7	7.7e
26.....	16b	8	12	10	13	14	25.3e	13.2	20.5	11.5e	10.6e	8.1e
27.....	16.2	7	12	10	13	13	25.3	12.9	21.6e	11.7e	10.4	8.5e
28.....	15.7	6	12	11	12	49	24.8	12.9	22.7e	11.9	5.2	8.9e
29.....	17.2	5	17	9	-	55	24.8	13.5	23.7e	11.3	9.3	9.3
30.....	15.7	6	13	8	-	61	17.2	13.5	24.8	11.3	9.6	8.5
31.....	15.3	-	9	6	-	67	-	13.5e	-	10.4	9.8e	-
Mean	15.9	15.5	10.4	10.5	14.4	27.4	27.9	14.9	16.5e	13.6	8.97	7.86
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	978	922	637	643	797	1,690	1,660	914	980	837	552	468

The Year..... Discharge: Daily - Maximum 31 March, 67
- Minimum 10 December, 2

Mean 15.3

Runoff: Acre-feet 11,080

b - Ice conditions 22 to 26 October and 15 November to 2 April.

e - Estimated.

Location: Lat. 49° 58', long. 112° 05', in NE. 1/4 sec. 2, tp. 12, rge. 16, W. 4th Mer., Alberta, seven miles south and one mile east of Vauxhall. Gauge: Recording. Measurement of Discharge: By wading. Period of Record: May 1957 to date. Extremes Recorded: Daily - Maximum, 24 October 1957, 102 cfs, Minimum, 19 and 20 February 1958, 0 cfs; Instantaneous Maximum - 11 a.m., 24 October 1958, 126 cfs. Remarks: Records fair. Discharge is largely return flow from Bow River Development Irrigation District.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	21.6	19.3	10	3	3	4	46	5.8	22.7	36.1	12.4	15e
2.....	24.4	18.5	15	3	2	4	52b	5.6	27.3	35.2	12.6	
3.....	24.7	17.4	18	3	2	4	46.0e	5.0	18.1	30.8	15.8	
4.....	24.4	17.6	17	2	2	4	40.0e	4.2	19.2	27.0	16.7	
5.....	27.6	16.8	16	2	2	3	33.9e	3.9	17.5	28.2	12.6	
6.....	30.2	16.0	15	2	2	3	27.9e	3.4	17.5	28.2	12.6	15e
7.....	28.9	16.3	15	2	2	2	21.8e	2.5	19.8	32.6	14.8	
8.....	26.9	16.6	14	2	2	2	15.8	2.5	20.6	33.7	13.9	
9.....	27.2	16.8	13	2	2	1	17.8	2.1	24.5	32.6	15.3	
10.....	25.3	16.8	12	2	2	1	16.4	2.0	21.8	30.8	18.1	
11.....	24.4	16.8	10	2	1	1	14.5	1.9	20.4	28.9	18.1	19e
12.....	25.0	17.1	9	2	1	2	13.7	2.4	19.2	24.5		
13.....	24.7	17.4	7	2	1	2	12.6	4.0	15.6	27.9		
14.....	25.6	16.8	6	2	1	2	11.3	3.2	13.9	43.5		
15.....	25.6	6b	4	2	1	2	11.1	2.5	26.7	37.7		
16.....	24.7	9	3	3	1	2	8.9	3.0	30.1	30.1		19e
17.....	24.7	10	7	4	1	3	7.1	3.4	23.6	27.6		
18.....	21.9	10	11	4	1	3	5.0	3.2	32.2	25.1		
19.....	21.0	10	10	5	0	2	4.6	3.2	34.1	22.1		
20.....	21.0	8x	9	6	0	3	4.6	5.0	31.8	20.6		
21.....	21.0	8	7	6	1	3	3.4	4.2	31.1	24.8		16.7x
22.....	4.9	8	6	6	2	4	5.2	2.7	36.1	24.2		
23.....	58	8	5	6	4	5	7.1	2.5	36.5	32.2		
24.....	102	8	5	6	5	5	6.2	2.3	31.8	36.5		
25.....	81	8	4	5	5	6	6.9	2.3	25.7	34.4	20.6x	
26.....	64	8	4	5	5	12	6.6	3.2	24.8	27.9	14.8	19e
27.....	34.8	8	4	5	5	18	6.2	2.8	25.4	19.2	14.8	
28.....	24.4	8	4	5	4	23	6.2	5.0	30.5	20.1	15e	
29.....	22.5	8	4	5	-	29	6.6	3.9	32.2	19.5	15e	
30.....	27.9	8	3	4	-	35	5.8	8.4	37.3	17.5	15e	
31.....	23.1	-	3	4	-	40	-	9.8	-	13.4	15e	-
Mean	31.1	12.4	8.71	3.61	2.14	7.42	15.7	3.74	25.6	28.2	16.8e	15.7e
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	1,910	740	536	222	119	456	935	230	1,520	1,730	1,030e	936e

The Year..... Discharge: Daily - Maximum 24 October, 102
- Minimum 19 and 20 February, 0
Instantaneous Maximum 11 a.m., 24 October, 126
Mean 14.3
Runoff: Acre-feet 10,360

b - Ice conditions 15 November to 2 April. e - Estimated. x - Staff gauge readings.

Location: Lat. 49° 55' 00", long. 111° 43' 40", in NW. 1/4 sec. 16, tp. 11, rge. 13, W. 4th Mer., Alberta, about seven-teen miles southeast of Hays and four hundred feet above confluence with Oldman River. Gauge: Recording. Measure-
of Discharge: By wading. Period of Record: May to October 1958. Extremes Recorded: Daily - Maximum, 6 and 23
July 1958, 13.6 cfs, Minimum, Nil at various times; Instantaneous Maximum - 11 a.m., 23 July 1958, 15.9 cfs. Remarks:
Records excellent. Discharge is largely return flow from Bow River Development Irrigation District.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	-	Nil	7.0	10.6	3.1	5.7	0.9	Nil	-
2.....	-	-	-	-	"	11.1	10.2	3.4	8.8	0.9	Nil	-
3.....	-	-	-	-	"	8.3	10.2	2.8	7.0	1.1	2.3	-
4.....	-	-	-	-	"	7.4	8.3	2.3	5.7	2.8	9.2	-
5.....	-	-	-	-	"	4.9	9.2	1.6	5.3	4.9	8.8	-
6.....	-	-	-	-	"	2.8	13.6	1.4	4.9	5.7	-	-
7.....	-	-	-	-	"	2.5	13.1	2.0	4.9	4.9	-	-
8.....	-	-	-	-	"	2.8	11.6	6.1	4.9	5.3	-	-
9.....	-	-	-	-	"	2.8	6.5	6.5	5.3	7.4	-	-
10.....	-	-	-	-	"	2.5	5.7	7.9	4.9	6.1	-	-
11.....	-	-	-	-	"	6.5	6.5	9.2	4.9	2.3	-	-
12.....	-	-	-	-	"	4.9	6.5	10.6	5.3	1.6	-	-
13.....	-	-	-	-	"	2.3	7.9	8.8	8.8	2.0	-	-
14.....	-	-	-	-	"	1.8	10.6	5.3	9.7	1.8	-	-
15.....	-	-	-	-	"	7.4	11.1	4.5	7.9	2.5	-	-
16.....	-	-	-	-	"	9.2	4.9	3.8	7.4	3.1	-	-
17.....	-	-	-	-	"	9.7	2.3	3.1	6.1	2.3	-	-
18.....	-	-	-	-	"	10.2	3.1	2.8	4.9	2.5	-	-
19.....	-	-	-	-	"	9.7	4.5	2.3	2.5	1.4	-	-
20.....	-	-	-	-	"	9.2	4.1	2.0	2.5	0.8	-	-
21.....	-	-	-	-	"	10.6	4.9	2.8	2.0	0.8	-	-
22.....	-	-	-	-	0.1	11.1	6.1	5.7	2.0	0.8	-	-
23.....	-	-	-	-	1.4	11.1	13.6	5.3	2.0	0.5	-	-
24.....	-	-	-	-	1.1	11.6	10.2	4.9	2.3	0.2	-	-
25.....	-	-	-	-	0.8	8.8	5.7	4.1	1.6	Nil	-	-
26.....	-	-	-	-	0.2	9.2	3.1	4.5	1.2	"	-	-
27.....	-	-	-	-	Nil	10.2	4.9	6.5	1.2	"	-	-
28.....	-	-	-	-	0.1	12.1	5.3	11.6	1.1	"	-	-
29.....	-	-	-	-	1.4	11.6	4.9	11.6	0.9	"	-	-
30.....	-	-	-	-	2.5	11.1	3.8	7.9	0.9	"	-	-
31.....	-	-	-	-	2.8	-	3.1	7.4	-	"	-	-
Mean	-	-	-	-	0.34	7.68	7.29	5.22	4.42	2.02	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	-	-	21	457	448	321	263	124	-	-

The Period..... Discharge: Daily - Maximum 6 and 23 July, 13.6
(184 days) - Minimum at various times, Nil
Instantaneous Maximum 11 a.m., 23 July, 15.9
Mean 4.48
Runoff: Acre-feet 1,630

LETHBRIDGE NORTHERN IRRIGATION DISTRICT CANAL
AT MENZAGHIES BRIDGE - STATION No. 5AB₁₆

Source: Oldman River. Location: Lat. 49° 44', long. 113° 33', in NE. 1/4 sec. 11, tp. 9, rge. 27, W. 4th Mer., Alberta, two and one-half miles north of Oldman River Flume and six miles west of Fort Macleod. Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: Irrigation seasons 1925 to 1930, and 1932 to date. Records from 1927 to 1930 were published under the title "Lethbridge Northern Irrigation District Canal two and one-half miles north of Oldman Flume". Extremes Recorded: Daily - Maximum, 15 and 16 May 1944, 844 cfs. Revisions: June and September 1938 mean discharges have been corrected to 452 and 195 cfs; 1943, W.R.P. 117; June, August and September 1950 mean discharges have been corrected to 510, 435 and 320 cfs. All published monthly mean discharges for the 1953 season apply to the full month. Remarks: Discharge represents the total diversion to the Lethbridge Northern Irrigation District and records are supplied by officials of that District. The data for the seasons 1925, 1926 and 1932 to 1935 have not been published but are available from the District Engineer at Calgary, for address see page 8.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	-	Nil	522	143	173	157	182	-	-
2.....	-	-	-	-	"	522	211	173	150	182	-	-
3.....	-	-	-	-	"	522	253	182	165	182	-	-
4.....	-	-	-	-	"	539	242	242	165	182	-	-
5.....	-	-	-	-	103	539	242	242	157	182	-	-
6.....	-	-	-	-	125	522	242	340	150	182	-	-
7.....	-	-	-	-	125	556	314	327	150	182	-	-
8.....	-	-	-	-	131	556	253	327	143	182	-	-
9.....	-	-	-	-	182	539	253	327	165	182	-	-
10.....	-	-	-	-	265	522	242	327	182	182	-	-
11.....	-	-	-	-	265	253	231	314	182	182	-	-
12.....	-	-	-	-	327	157	231	327	182	182	-	-
13.....	-	-	-	-	301	157	231	314	242	182	-	-
14.....	-	-	-	-	265	150	211	314	327	182	-	-
15.....	-	-	-	-	277	143	125	191	327	182	-	-
16.....	-	-	-	-	301	143	119	211	314	253	-	-
17.....	-	-	-	-	340	137	119	211	301	253	-	-
18.....	-	-	-	-	289	131	119	201	301	277	-	-
19.....	-	-	-	-	277	131	113	201	242	289	-	-
20.....	-	-	-	-	277	137	191	201	165	367	-	-
21.....	-	-	-	-	381	201	231	201	173	367	-	-
22.....	-	-	-	-	441	191	277	201	173	289	-	-
23.....	-	-	-	-	441	191	353	165	157	173	-	-
24.....	-	-	-	-	457	340	353	131	165	81	-	-
25.....	-	-	-	-	457	426	353	137	165	Nil	-	-
26.....	-	-	-	-	489	411	353	143	165	"	-	-
27.....	-	-	-	-	539	411	340	157	157	"	-	-
28.....	-	-	-	-	539	314	265	157	157	"	-	-
29.....	-	-	-	-	539	157	157	173	157	"	-	-
30.....	-	-	-	-	539	143	182	173	157	"	-	-
31.....	-	-	-	-	505	-	182	165	-	"	-	-
Mean	-	-	-	-	296	322	230	224	193	164	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	-	-	18,200	19,170	14,140	13,780	11,490	10,070	-	-

The Period..... Discharge: Daily - Maximum 7 and 8 June, 556
(184 days) Runoff: Acre-feet 86,860

LETHBRIDGE NORTHERN IRRIGATION DISTRICT
MONARCH BRANCH CANAL - STATION No. 5AC₁₁

235

Source: Oldman River via Lethbridge Northern I.D. Canal. Location: Lat. 49° 53', long. 113° 12', in NE. 1/4 sec. 3, tp. 11, rge. 24, W. 4th Mer., Alberta, near headgates on main canal about ten miles above Kehoe Lake and six miles northwest of Monarch. Gauge: Recording. Measurement of Discharge: From bridge or by wading. Period of Record: Irrigations seasons 1932 to date. Extremes Recorded: Daily - Maximum, 28 and 29 July 1945, 458 cfs. Revisions: 1937, 1939, 1947, 1948 and 1953, W.R.P. 117. The following are corrected mean discharges: May 1939, 115 cfs; July 1939, 170 cfs; July 1946, 172 cfs; July 1947, 219 cfs; and August 1950, 136 cfs; June to October 1951 monthly-mean discharges were not published and are as follows: 4.33, 29.0, 99.1, 1.20 and 16.5 cfs. Remarks: Records supplied by Lethbridge Northern Irrigation District. Records for 1932 to 1935 not published but are available from the District Engineer at Calgary, for address see page 8.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	-	<u>Nil</u>	107	76	73	76	58	-	-
2.....	-	-	-	-	"	101	76	93	76	58	-	-
3.....	-	-	-	-	"	96	76	101	83	61	-	-
4.....	-	-	-	-	"	93	76	104	88	66	-	-
5.....	-	-	-	-	"	96	76	131	91	66	-	-
6.....	-	-	-	-	"	93	76	193	86	63	-	-
7.....	-	-	-	-	"	96	83	207	86	66	-	-
8.....	-	-	-	-	"	96	91	<u>211</u>	101	63	-	-
9.....	-	-	-	-	"	96	93	204	119	66	-	-
10.....	-	-	-	-	"	83	93	204	131	66	-	-
11.....	-	-	-	-	"	71	122	207	165	66	-	-
12.....	-	-	-	-	"	44	131	169	169	66	-	-
13.....	-	-	-	-	22	<u>54</u>	107	169	<u>152</u>	66	-	-
14.....	-	-	-	-	50	66	71	149	143	86	-	-
15.....	-	-	-	-	38	66	50	146	119	113	-	-
16.....	-	-	-	-	40	66	50	149	83	143	-	-
17.....	-	-	-	-	36	76	<u>48</u>	146	66	162	-	-
18.....	-	-	-	-	36	91	58	131	63	190	-	-
19.....	-	-	-	-	40	91	71	125	66	190	-	-
20.....	-	-	-	-	38	96	71	125	66	<u>200</u>	-	-
21.....	-	-	-	-	48	88	96	113	66	165	-	-
22.....	-	-	-	-	61	81	143	96	61	128	-	-
23.....	-	-	-	-	61	81	<u>176</u>	73	63	83	-	-
24.....	-	-	-	-	61	96	<u>149</u>	<u>58</u>	58	58	-	-
25.....	-	-	-	-	61	96	137	73	<u>56</u>	48	-	-
26.....	-	-	-	-	83	107	125	76	56	<u>Nil</u>	-	-
27.....	-	-	-	-	107	<u>113</u>	113	96	56	"	-	-
28.....	-	-	-	-	122	93	98	96	56	"	-	-
29.....	-	-	-	-	137	76	73	86	56	"	-	-
30.....	-	-	-	-	<u>137</u>	76	61	76	56	"	-	-
31.....	-	-	-	-	122	-	61	76	-	"	-	-
Mean	-	-	-	-	41.9	86.2	91.2	128	87.1	77.3	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	-	-	2,580	5,130	5,610	7,850	5,180	4,750	-	-

The Period..... Discharge: Daily - Maximum 8 August, 211
(184 days) Runoff: Acre-feet 31,100

LETHBRIDGE NORTHERN IRRIGATION DISTRICT
TURIN BRANCH CANAL - STATION No. 5AC₁₀

Source: Oldman River via Lethbridge Northern I. D. Canal and Keho Lake. Location: Lat. 49° 47', long. 112° 57', in NE. 1/4 sec. 33, tp. 11, rge. 22, W. 4th Mer., Alberta, near outlet from Keho Lake and about thirteen miles northeast of Monarch. Gauge: Recording, Measurement of Discharge: From bridge or by wading. Period of Record: Irrigation seasons, 1924 to 1930 and 1932 to date; miscellaneous measurements in 1931. Extremes Recorded: Daily - Maximum, 19 June 1930, 656 cfs. Revisions: August 1950 and August 1951 mean discharges have been corrected to 242 and 151 cfs. All published monthly mean discharges for the 1953 season apply to the full month. Remarks: Records supplied by Lethbridge Northern Irrigation District. Prior to 1936 records were not published but are available from the District Engineer at Calgary, for address see page 8.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	-	Nil	220	172	148	184	120	-	-
2.....	-	-	-	-	"	220	172	160	193	120	-	-
3.....	-	-	-	-	"	202	189	160	180	117	-	-
4.....	-	-	-	-	"	180	198	229	202	117	-	-
5.....	-	-	-	-	"	180	202	305	211	117	-	-
6.....	-	-	-	-	"	180	202	310	211	117	-	-
7.....	-	-	-	-	"	168	202	335	216	113	-	-
8.....	-	-	-	-	"	172	220	345	229	110	-	-
9.....	-	-	-	-	"	172	220	345	243	106	-	-
10.....	-	-	-	-	"	189	234	340	238	117	-	-
11.....	-	-	-	-	"	176	252	351	247	117	-	-
12.....	-	-	-	-	"	180	256	351	252	120	-	-
13.....	-	-	-	-	"	180	252	351	247	120	-	-
14.....	-	-	-	-	"	176	202	340	247	136	-	-
15.....	-	-	-	-	38	176	172	320	207	152	-	-
16.....	-	-	-	-	38	180	172	295	189	160	-	-
17.....	-	-	-	-	38	207	168	295	184	176	-	-
18.....	-	-	-	-	38	207	176	270	180	184	-	-
19.....	-	-	-	-	38	216	180	270	172	180	-	-
20.....	-	-	-	-	38	216	180	256	164	184	-	-
21.....	-	-	-	-	65	229	207	256	160	184	-	-
22.....	-	-	-	-	65	229	234	252	148	189	-	-
23.....	-	-	-	-	65	243	243	220	136	189	-	-
24.....	-	-	-	-	82	252	202	220	136	184	-	-
25.....	-	-	-	-	103	265	202	220	132	148	-	-
26.....	-	-	-	-	113	243	168	216	132	103	-	-
27.....	-	-	-	-	220	202	168	211	124	46	-	-
28.....	-	-	-	-	220	207	160	211	120	Nil	-	-
29.....	-	-	-	-	220	207	156	207	120	"	-	-
30.....	-	-	-	-	220	207	152	198	120	"	-	-
31.....	-	-	-	-	220	-	152	193	-	"	-	-
Mean	-	-	-	-	58.7	203	196	264	184	120	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	-	-	3,610	12,060	12,030	16,220	10,960	7,390	-	-

The Period..... Discharge: Daily - Maximum 11, 12, 13 August, 351
(184 days) Runoff: Acre-feet 62,270

MISCELLANEOUS DISCHARGE MEASUREMENTS MADE IN OLDMAN RIVER TRIBUTARY BASIN
FOR THE YEAR 1958

Date	Stream	Location	Discharge cfs
19 June	South MacLeod Irrigation District Canal	SW. 1/4 sec. 3, tp. 9, rge. 26, W. 4th Mer.	14.1
19 June	"	Below W. boundary sec. 3, tp. 9, rge. 26, W. 4th Mer.	16.4

BELLY RIVER AT INTERNATIONAL BOUNDARY - STATION No. 5AD_{0.4}

(International Gauging Station)

Location: Lat. 48° 59' 50", long. 113° 40' 50", in NW. 1/4 sec. 2, tp. 37 N., rge. 16 W., Montana, approximately one mile west of Chief Mountain Customs Port on Chief Mountain Highway, two hundred feet upstream from International Boundary and about three miles above confluence with North Fork. Drainage Area: 74.8 square miles. Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: Continuous May 1947 to September 1957 and open water 1958. Average Discharge: (10 years) - 262 cfs. Extremes Recorded: Daily - Maximum, 4 June 1953, 2,420 cfs, Minimum, 12 and 13 February 1949, 12 cfs; Instantaneous Maximum - at noon, 4 June 1953, 2,450 cfs. Revisions: Data to 1950 inclusive were reviewed in co-operation with the United States Geological Survey and revised data are available upon application to the District Engineer at Calgary, for address see page 8. Remarks: Records good. This station is maintained by the United States under agreement with Canada. Prior to October 1948, records were obtained and published by the United States Geological Survey.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	96	-	-	-	-	-	-	-	707	492	290	116
2.....	107	-	-	-	-	-	-	-	650	444	281	109
3.....	122	-	-	-	-	-	-	-	612	413	277	109
4.....	-	-	-	-	-	-	-	-	740	387	260	104
5.....	-	-	-	-	-	-	-	-	795	373	234	97
6.....	-	-	-	-	-	-	-	-	756	373	218	92
7.....	-	-	-	-	-	-	-	-	712	356	206	91
8.....	-	-	-	-	-	-	-	-	675	369	198	90
9.....	-	-	-	-	-	-	-	-	707	395	202	92
10.....	-	-	-	-	-	-	-	-	1,200	395	198	94
11.....	-	-	-	-	-	-	-	-	1,100	391	206	97
12.....	-	-	-	-	-	-	-	-	910	391	222	109
13.....	-	-	-	-	-	-	-	-	756	395	210	120
14.....	-	-	-	-	-	-	-	-	645	395	194	138
15.....	-	-	-	-	-	-	-	-	594	369	184	135
16.....	-	-	-	-	-	-	-	734	568	329	177	131
17.....	-	-	-	-	-	-	-	822	563	307	170	131
18.....	-	-	-	-	-	-	-	828	572	307	160	129
19.....	-	-	-	-	-	-	-	773	645	303	160	141
20.....	-	-	-	-	-	-	-	773	680	307	160	166
21.....	-	-	-	-	-	-	-	883	645	303	157	170
22.....	-	-	-	-	-	-	-	990	599	307	157	166
23.....	-	-	-	-	-	-	-	1,030	572	334	157	163
24.....	-	-	-	-	-	-	-	1,040	568	321	155	163
25.....	-	-	-	-	-	-	-	1,040	558	299	155	157
26.....	-	-	-	-	-	-	-	1,040	523	299	152	135
27.....	-	-	-	-	-	-	-	1,000	541	281	149	131
28.....	-	-	-	-	-	-	-	944	670	264	160	131
29.....	-	-	-	-	-	-	-	927	635	264	157	131
30.....	-	-	-	-	-	-	-	872	563	312	143	131
31.....	-	-	-	-	-	-	-	790	-	299	127	-
Mean	-	-	-	-	-	-	-	-	682	348	190	126
Per sq. mi.	-	-	-	-	-	-	-	-	9.12	4.65	2.54	1.68
Acre-feet	-	-	-	-	-	-	-	-	40,580	21,370	11,650	7,480

The Period.... Discharge: Daily - Maximum 10 June, 1,200
 (122 days) Instantaneous Maximum 12 noon, 10 June, 1,240
 Mean 335; Per Square Mile 4.48
 Runoff: Acre-feet 81,080; Depth in inches on drainage area 20.33

(International Gauging Station)

Location: Lat. 49° 06', long. 113° 42', in NE, 1/4 sec. 5, tp. 2, rge. 28, W. 4th Mer., Alberta, at John West's Ranch, six miles southwest of Mountain View, and about eight miles downstream from International Boundary. Drainage Area: 121 square miles. Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: November 1911 to date. Records prior to 6 April 1949 were obtained from manual gauges near the present site. Average Discharge: (46 years) - 314 cfs. Extremes Recorded: Daily - Maximum, 4 June 1953, 4,250 cfs, Minimum, 8 February 1941, 14 cfs; Instantaneous Maximum - 4 a.m., 4 June 1953, 4,500 cfs (by slope-area determination). During the flood of June 1908 the discharge of this stream was considerably greater than the maximum recorded. Revisions: Data to 1950 inclusive were reviewed in co-operation with the United States Geological Survey and revised data are available upon application to the District Engineer at Calgary, for address see page 8. Remarks: Records excellent during open-water periods and fair during ice periods. This station is maintained by Canada under agreement with the United States. Prior to 1949, records were collected by Canada only. Water is diverted from the Belly River above this station to the Mountain View Irrigation District Canal.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	97	334	114	116	49	104	66	188	851	663	360	158
2.....	102	303	97	131	64	93	66	224	789	600	341	158
3.....	116	266	91	128	64	114	66	303	751	553	336	152
4.....	118	243	74	109	62	114	72	370	1,100	508	321	141
5.....	109	229	72	93	59	102	74	454	1,120	477	299	136
6.....	109	222	93	84	57	104	72	527	982	496	281	131
7.....	102	205	111	76	54	95	74	606	915	489	269	126
8.....	95	198	111	67	52	95	74	773	883	489	258	126
9.....	91	182	88	54	60	82	78	982	968	533	261	126
10.....	91	173	84	52	64	82	80	1,220	1,810	566	261	126
11.....	97	166	97	52	57	78	88	1,330	1,530	527	265	131
12.....	102	157	86	52	56	86	100	1,430	1,340	514	236	144
13.....	109	154	84	50	60	95	124	1,350	1,150	533	185	161
14.....	116	151	78	49	62	93	164	1,110	982	533	173	176
15.....	118	145	82	50	69	104	179	974	883	502	167	176
16.....	142	139	104	39	65	104	192	1,030	827	454	161	170
17.....	166	128b	100	54	57	67x	198	1,130	804	430	152	170
18.....	195	118	91	62	56	94	211	1,110	804	413	119	173
19.....	188	114	76	44	64	118x	204	1,040	974	413	106	176
20.....	173	116	88	62	65	111	218	1,060	1,110	413	108	221
21.....	166	97	91	62	65	102	214	1,200	991	413	92	221
22.....	145	114	91	49	65	84	214	1,300	891	413	109	218
23.....	139b	139	54	43	76	82	204	1,360	827	454	211	221
24.....	136	76	59	31	84	82	185	1,370	812	424	204	163
25.....	157	62	70	27	109	72	170	1,380	773	397	201	98
26.....	157b	56	91	25	121	64	161	1,360	714	397	198	78
27.....	169	67	91	32	123	62	155	1,270	728	365	198	72
28.....	166	104	97	46	121	59	152	1,180	932	341	207	76
29.....	176	80	86	44	-	65	149	1,150	875	331	204	76
30.....	270	97	78	46	-	62	164	1,050	766	402	188	74
31.....	362	-	100	43	-	65b	-	940	-	370	173	-
Mean	144	154	88.0	60.4	70.0	88.2	139	993	963	465	214	146
Per sq.mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	8,880	9,190	5,410	3,710	3,890	5,420	8,270	61,030	57,290	28,590	13,180	8,680

The Year.....Discharge: Daily - Maximum 10 June, 1,810
 - Minimum 26 January, 25
 Instantaneous Maximum 8:50 a.m., 10 June, 1,930
 Mean 295
 Runoff: Acre-feet 213,500

b - Ice conditions 23 to 26 October and 17 November to 31 March.
 x - Staff gauge readings.

Location: Lat. 49° 29', long. 113° 18', in SE. 1/4 sec. 21, tp. 6, rge. 25, W. 4th Mer., Alberta, five miles above confluence with Waterton River. Drainage Area: 476 square miles (revised). Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: Periods of varying length 1909 to 1931, 1935 and 1936; continuous October 1948 to date. Average Discharge: (21 years) - 378 cfs. Extremes Recorded: Daily - Maximum, 9 June 1953, 9,650 cfs, Minimum, 22 March 1917, 9 cfs; Instantaneous Maximum - 3 a.m., 9 June 1953, 10,690 cfs. Revisions: 1915, 1916 Report; 1916, 1917 Report; 1923, 1951, W.R.P. 117. Remarks: Records excellent during open-water periods and fair during ice periods. Discharge is affected by upstream diversions for irrigation purposes.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	36.7	442	87	28	21	202	417	224	886	760	376	165
2.....	36.7	391	101	35	24	135	386	246	812	679	361	159
3.....	39.3	354	93	60	28	127	262	288	760	624	351	156
4.....	62	318	97	132	53	101	266	386	846	583	332	146
5.....	84	280	109	188	63	118	427	459	1,220	565	314	130
6.....	86	264	91	162	46	120	459	548	1,070	577	292	122
7.....	89	237	95	127	35	80	332	606	1,010	606	270	113
8.....	89	222	107	132	24	86	266	704	955	565	254	101
9.....	86	230b	123	91	20	74	266	879	893	560	250	95
10.....	82	212	109	89	16	63	243	1,120	1,450	624	239	97
11.....	84	194	99	77	32	68	246	1,340	1,800	600	243	93
12.....	80	165	77	77	37	60	254	1,470	1,490	571	254	79
13.....	79	151	80	62	58	55	292	1,660	1,340	577	213	88
14.....	79	143	65	62	48	35	296	1,410	1,110	589	146	103
15.....	80	135	93	69	39	34	283	1,140	976	583	127	122
16.....	82	127x	44	71	50	99	275	1,050	886	525	109	140
17.....	99	123	86	62	56	45	279	1,150	839	470	99x	143
18.....	143	116	95	63	68	44	279	1,200	859	438	89x	140
19.....	198	116	66	62	68	60	279	1,150	866	422	76x	138
20.....	202	241	65	39	55	60	266	1,120	1,200	411	66x	151
21.....	198	208	68	35	77	62	275	1,160	1,140	411	61x	186
22.....	175	185	59	59	162	53	288	1,300	1,020	386	57x	189
23.....	111x	198	42	65	151	60	288	1,390	893	411	54x	206
24.....	148b	162	27	56	165	63	270	1,410	800	427	64x	235
25.....	253x	137	25	59	135	77	246	1,420	786	422	84x	186
26.....	245x	137	28	62	226	114	246	1,410	729	417	109	115
27.....	245x	154	32	16	191	260x	239	1,360	729	401	115	93
28.....	216b	99	35	33	175	685	239	1,200	990	396	143	79
29.....	205	74	28	27	-	691	227	1,140	1,010	361	177	76
30.....	305	82	21	49	-	519b	216	1,050	900	371	186	79
31.....	469	-	21	29	-	448	-	976	-	411	183	-
Mean	142	197	69.9	70.3	75.8	152	287	1,031	1,009	508	184	131
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	8,700	11,700	4,300	4,320	4,210	9,320	17,070	63,400	60,030	31,230	11,290	7,790

The Year.....Discharge: Daily - Maximum 11 June, 1,800
 - Minimum 27 January and 10 February, 16
 Instantaneous Maximum 11 p.m., 10 June, 1,960
 Mean 322
 Runoff: Acre-feet 233,400

b - Ice conditions 24 to 28 October and 9 November to 30 March.
 x - Staff gauge readings 16 November to 27 March and as indicated.

(International Gauging Station)

Source: Belly River. Location: Lat. 49° 06' 00", long. 113° 41' 30", in NW. 1/4 sec. 4, tp. 2, rge. 28, W. 4th Mer., Alberta, about one and one-half miles below headgate on John West's Ranch and six miles southwest of Mountain View. Gauge: Recording. Measurement of Discharge: From footbridge or by wading. Period of Record: Irrigation seasons 1935 to date. The recording gauge was established in the spring of 1952, about one-half mile below the former wire-weight gauge station. Extremes Recorded: Daily - Maximum, 16 August 1957, 142 cfs; Instantaneous Maximum - 1:10 p.m., 26 June 1950, 154 cfs. Revisions: Data to 1950 inclusive were reviewed in co-operation with the United States Geological Survey and revised data are available upon application to the District Engineer at Calgary, for address see page 8. Remarks: Records good during open-water period and fair during ice period. This station is maintained by Canada under agreement with the United States. Prior to 1949, records were collected by Canada only.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	0.1	3.3	114	6.6	0.9	0.5	113	4.0	-
2.....	-	-	-	0.1	2.9	113	7.8	0.9	0.4	111	4.0	-
3.....	-	-	-	0.1	3.1	104	6.6	0.7	0.6	108	2.5	-
4.....	-	-	-	0.1	2.7	96	6.2	0.7	0.6	115	0.9	-
5.....	-	-	-	0.0	2.7	95	5.6	0.7	0.6	115	-	-
6.....	-	-	-	0.0	2.5	95	9.0	0.7	0.5	114	-	-
7.....	-	-	-	0.1	2.3	102	6.2	0.6	0.4	92	-	-
8.....	-	-	-	0.1	2.3	87	5.3	0.6	0.3	115	-	-
9.....	-	-	-	0.2	2.1	86	4.7	0.6	0.2	102	-	-
10.....	-	-	-	0.3	2.3	97x	4.4	0.6	0.2	1.1	-	-
11.....	-	-	-	2	2.3	95	3.6	0.4	0.2	0.5	-	-
12.....	-	-	-	3	6.2	40.2	3.4	36.5	0.2	0.3	-	-
13.....	-	-	-	5b	5.0	6.2	5.0	86	0.1	0.3	-	-
14.....	-	-	-	2.7	2.9	5.0	4.7	86	0.1	0.2	-	-
15.....	-	-	-	0.9	2.5	4.0	3.6	82	0.1	0.2	-	-
16.....	-	-	-	1.0	6.7	3.4	2.8	80	0.1	25.6	-	-
17.....	-	-	-	1.0	3.9	3.2	2.4	79	0.1	94	-	-
18.....	-	-	-	0.9	1.9	3.2	2.3	103	0.1	95	-	-
19.....	-	-	-	0.8	1.6	3.2	2.2	118	0.1	96	-	-
20.....	-	-	-	1.0	1.6	3.8	2.4	114	0.1	98	-	-
21.....	-	-	-	1.0	1.5	5.6	2.3	126	0.1	97	-	-
22.....	-	-	-	1.2	1.6	5.3	1.9	112	0.1	96	-	-
23.....	-	-	-	1.0	1.3	4.7	3.4x	1.2	0.2	96	-	-
24.....	-	-	-	0.8	1.5	4.7	3.4	0.7	26.3	96	-	-
25.....	-	-	-	0.9	1.5	4.7x	3.0	0.6	115	94	-	-
26.....	-	-	0.1b	0.9	1.5	7.0	2.3	0.5	114	92	-	-
27.....	-	-	0.1	1.0	45.2	11.9	1.9	0.5	114	45.2	-	-
28.....	-	-	0.2	1.2	89	9.9	1.7	0.7	114	4.3	-	-
29.....	-	-	0.1	2.1	97	7.4	1.6	0.6	114	1.0	-	-
30.....	-	-	0.1	3.3	114	7.0	1.7x	0.6	114	5.9	-	-
31.....	-	-	0.1	-	114	-	1.2	0.5	-	10.9	-	-
Mean	-	-	-	1.09	17.1	40.8	3.85	33.4	23.9	65.6	0.90e	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	-	65	1,050	2,430	236	2,050	1,420	4,040	54	-

The Period.....Discharge: Daily - Maximum 21 August, 126
 (244 days) - Minimum at various times, 0.0
 Instantaneous Maximum at noon, 21 August, 127
 Runoff: Acre-feet 11,340

b - Ice conditions 26 March to 13 April. - e - Estimated.
 x - Staff gauge readings 10 to 25 June, 23 to 30 July and as indicated.
 Gauge heights from graph of observed readings 10 to 25 June and 23 to 30 July.

Source: Belly River. Location: Lat. 49° 13', long. 113° 38', in NE. 1/4 sec. 13, tp. 3, rge. 28, W. 4th Mer., Alberta, near headgate about six miles north of Mountain View. Gauge: Recording. Measurement of Discharge: From cable-way or by wading. Period of Record: July to November 1923 and irrigation seasons 1924 to 1930 and 1946 to date. Records prior to 22 June 1947 obtained from staff gauge near present site. Extremes Recorded: Daily - Maximum, 13 July 1925, 291 cfs; Instantaneous Maximum - 10 a.m., 17 June 1950, 321 cfs. Revisions: 1926, 1927, W.R.P. 117; 16 to 31 May 1927 mean discharge and runoff were not published in W.R.P. 57 and are as follows: 4.6 cfs and 146 acre-feet. Remarks: Records good.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	5e	0.7	123	43.7	41.6	49.3	51	65	10e
2.....	-	-	-		0.7	122	43.0	41.6	50	48.6	65	
3.....	-	-	-		0.5	94	43.0	43.0	50	47.9	65	
4.....	-	-	-		0.3	82	42.3	44.4	50	42.3	30.1	
5.....	-	-	-		0.1	81	42.3	44.4	50	39.5	13.6	
6.....	-	-	-	5e	0.0	79	43.0	43.0	49.3	35.7	10e	2e
7.....	-	-	-		19.7	92	42.3	42.3	49.3	38.1		
8.....	-	-	-		27.3	100	43.0	42.3	49.3	48.6		
9.....	-	-	-		5.0	22.5	118	43.0	54	49.3	54	
10.....	-	-	-		5.0	21.9	117	43.0	59	50	99	
11.....	-	-	-	4.7	21.3	76	41.6	58	70	118	2e	2e
12.....	-	-	-	4.7	13.4	60	41.6	58	83	119		
13.....	-	-	-	4.7	1.0	58	42.3	73	85	119		
14.....	-	-	-	4.4	13.9	57	43.7	84	87	119		
15.....	-	-	-	2.7	23.1	54	49.3	90	78	100		
16.....	-	-	-	0.7	23.1	54	51	92	63	88	2e	2e
17.....	-	-	-	0.6	23.7	53	53	90	63	76		
18.....	-	-	-	0.6	14.1	55	52	85	63	78		
19.....	-	-	-	0.5	17.0	58	51	78	64	90		
20.....	-	-	-	0.5	17.6e	58	51	82	65	93		
21.....	-	-	-	0.3	18.2e	43.0	54	66	65	92	2e	2e
22.....	-	-	-	0.4	18.8	34.5	74	65	66	91		
23.....	-	-	-	0.3	54	55	74	131	47.9	90		
24.....	-	-	-	0.5	58	70	54	133	35.7	89		
25.....	-	-	-	0.7	56	77	43.7	115	33.9	72		
26.....	-	-	-	0.7	69	87	43.7	103	32.7	64	2x	2x
27.....	-	-	-	0.7	82	59	43.0	103	32.7	65		
28.....	-	-	-	0.7	91	7.0	42.3	82	33.3	67		
29.....	-	-	-	0.7	119	7.0	41.6	68	33.9	67		
30.....	-	-	-	0.7	128	31.9	42.3	57	45.1	66		
31.....	-	-	-	-	126	-	42.3	50	-	66	-	2e
Mean	-	-	-	2.66	34.9	68.7	47.1	71.6	54.8	75.3	11.2e	2.00e
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	-	158	2,150	4,090	2,900	4,400	3,260	4,630	668	123

The Period.....Discharge: Daily - Maximum 24 August, 133
 (275 days) Instantaneous Maximum 9 a.m., 23 August, 135
 Runoff: Acre-feet 22,380

e - Estimated.

x - Staff gauge readings.

WATERTON RIVER TRIBUTARY BASIN

WATERTON RIVER NEAR INTERNATIONAL BOUNDARY - STATION No. 5AD_{0,1}

(International Gauging Station)

Location: Lat. 48° 57' 20", long. 113° 54' 00", in NW. 1/4 sec. 23, tp. 37 N., rge. 18 W., Montana, one hundred feet below mouth of Olson Creek, about three miles south of International Boundary and one-half mile upstream from outlet into south end of Waterton Lake. Drainage Area: 61 square miles. Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: Continuous May 1947 to September 1957 and open water 1958. Average Discharge: (10 years) - 273 cfs. Extremes Recorded: Daily - Maximum, 22 June 1950, 2,460 cfs, Minimum, 7 January 1953, 9 cfs; Instantaneous Maximum - 3 a.m., 20 May 1954, 2,710 cfs. Revisions: Data to 1950 inclusive were reviewed in co-operation with the United States Geological Survey and revised data are available upon application to the District Engineer at Calgary, for address see page 8. Remarks: Records good. This station is maintained by the United States under agreement with Canada. Data for period May 1947 to September 1948 were obtained and published by the United States Geological Survey.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	40.5	-	-	-	-	-	-	-	1,140	296	119	62
2.....	45.0	-	-	-	-	-	-	-	1,010	265	116	60
3.....	-	-	-	-	-	-	-	-	869	254	110	59
4.....	-	-	-	-	-	-	-	-	1,010	235	105	57
5.....	-	-	-	-	-	-	-	-	993	228	98	54
6.....	-	-	-	-	-	-	-	-	993	228	92	54
7.....	-	-	-	-	-	-	-	-	1,020	224	88	52
8.....	-	-	-	-	-	-	-	-	935	228	88	52
9.....	-	-	-	-	-	-	-	-	1,030	228	88	52
10.....	-	-	-	-	-	-	-	-	1,590	224	88	52
11.....	-	-	-	-	-	-	-	-	1,090	221	88	50
12.....	-	-	-	-	-	-	-	-	899	224	92	52
13.....	-	-	-	-	-	-	-	-	731	228	88	64
14.....	-	-	-	-	-	-	-	-	685	210	83	95
15.....	-	-	-	-	-	-	-	-	696	182	78	80
16.....	-	-	-	-	-	-	-	-	725	168	76	71
17.....	-	-	-	-	-	-	-	1,190	714	161	74	83
18.....	-	-	-	-	-	-	-	1,110	702	165	74	90
19.....	-	-	-	-	-	-	-	1,060	737	161	71	141
20.....	-	-	-	-	-	-	-	1,220	663	161	74	186
21.....	-	-	-	-	-	-	-	1,560	582	165	74	158
22.....	-	-	-	-	-	-	-	1,640	530	158	74	158
23.....	-	-	-	-	-	-	-	1,690	556	168	71	148
24.....	-	-	-	-	-	-	-	1,740	556	148	71	135
25.....	-	-	-	-	-	-	-	1,700	489	132	69	132
26.....	-	-	-	-	-	-	-	1,680	427	132	69	119
27.....	-	-	-	-	-	-	-	1,590	436	126	69	116
28.....	-	-	-	-	-	-	-	1,580	572	119	80	129
29.....	-	-	-	-	-	-	-	1,670	422	122	78	148
30.....	-	-	-	-	-	-	-	1,440	338	126	71	141
31.....	-	-	-	-	-	-	-	1,160	-	119	64	-
Mean	-	-	-	-	-	-	-	-	771	187	83.2	95.0
Per sq. mi.	-	-	-	-	-	-	-	-	12.64	3.07	1.36	1.56
Acre-feet	-	-	-	-	-	-	-	-	45,900	11,520	5,120	5,650

The Period.....Discharge: Daily - Maximum 24 May, 1,740
 (122 days) Instantaneous Maximum at 5 a.m., 24 May, 1,850
 Mean 282; Per Square Mile 4.62

Runoff: Acre-feet 68,190; Depth in inches on drainage area 20.96

WATERTON RIVER NEAR WATERTON PARK - STATION No. 5AD₃

243

(International Gauging Station)

Location: Lat. 49° 06' 50", long. 113° 50' 20", in NE. 1/4 sec. 8, tp. 2, rge. 29, W. 4th Mer., Alberta, near Highway No. 5 crossing, immediately below Waterton Lakes and about one-half miles above mouth of Crooked Creek. **Drainage Area:** 238 square miles. **Gauge:** Recording and wire-weight. **Measurement of Discharge:** From cableway or by wading. **Period of Record:** Periods of varying length 1908 to 1933 and continuous March 1948 to date. Prior to 7 February 1917, records were obtained by staff gauges near present site and prior to 18 March 1949 by chain or wire-weight gauges at bridge twohundred feet upstream. Records prior to 1916 published under title "at Waterton Mills". **Average Discharge:** (28 years) - 674 cfs. **Extremes Recorded:** Daily - Maximum, 6 June 1908, 24,000 cfs (estimated), Minimum, 27 March 1955, 31 cfs. **Revisions:** Data to 1950 inclusive were reviewed in co-operation with the United States Geological Survey and revised data are available upon application to the District Engineer at Calgary, for address see page 8. **Remarks:** Records excellent. This station is maintained by Canada under agreement with the United States. Prior to 1949, records were collected by Canada only.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	138	500	180	141	95	218	145	393	2,780	1,070	446	178
2.....	160	500	152	139	95	234	141	461	2,540	989	412	157
3.....	170	485	169	141	83	252	139	562	2,340	924	406	159
4.....	180	472	164	141	78	229	159	683	2,610	875	380	154
5.....	170	492	141	135	78	225	172	826	2,750	814	363	148
6.....	167	439	131	133	77	218	172	962	2,560	826	341	141
7.....	164	432	116	129	77	222	167	1,150	2,450	838	325	137
8.....	167	432	133	121	77	205	169	1,470	2,320	803	305	131
9.....	170	413	133	119	78	192	180	1,890	2,300	803	291	131
10.....	173	389	110	119	77	189	175	2,320	3,030	803	282	127
11.....	177	383	116	95	78	186	175	2,780	3,080	781	269	127
12.....	191	354	114	68	80	183	180	3,250	3,030	770	269	131
13.....	202	327	110	78	82	178	192	3,470	2,720	747	269	145
14.....	213	311	114	105	83	175	256	3,110	2,430	725	256	135
15.....	217	301	92	121	83	169	325	2,780	2,140	703	252	131
16.....	225	292	97	119	86	162	335	2,700	1,960	664	244	139
17.....	221	301	121	119	86	157	369	2,820	1,850	634	237	143
18.....	268	242	129	121	89	154	412	2,850	1,760	605	225	145
19.....	311	287	108	123	89	152	412	2,800	1,830	596	225	159
20.....	301	246	119	121	95	148	439	2,800	1,960	596	218	162
21.....	297	297	121	119	102	141	439	3,030	1,830	588	215	183
22.....	311	311	127	112	102	137	439	3,390	1,710	554	208	172
23.....	287	234	60	131	107	135	453	3,560	1,590	588	205	178
24.....	297	238	78	114	122	133	453	3,700	1,500	596	202	218
25.....	301	206	82	103	135	135	432	3,760	1,440	554	202	211
26.....	301	157	143	98	148	139	439	3,700	1,340	546	198	202
27.....	306	100	154	97	175	141	419	3,620	1,280	513	186	208
28.....	327	83b	159	97	198	139	412	3,470	1,380	490	202	198
29.....	365	136b	154	95	-	141	393	3,440	1,220	483	202	192
30.....	389	213b	145	95	-	145	380	3,300	1,150	498	195	198
31.....	492	-	143	92	-	150	-	3,030	-	483	183	-
Mean	247	319	126	114	98.4	174	299	2,519	2,096	692	265	161
Per sq.mi.	1.04	1.34	0.53	0.48	0.41	0.73	1.26	10.58	8.81	2.91	1.11	0.68
Acre-feet	15,190	18,990	7,770	7,020	5,460	10,680	17,800	154,900	124,700	42,560	16,290	9,600

The Year.....Discharge: Daily - Maximum 25 May, 3,760
 - Minimum 23 December, 60
 Instantaneous Maximum 8 a.m., 25 May, 3,790
 Mean 595; Per Square Mile 2.50
 Runoff: Acre-feet 431,000; Depth in inches on drainage area 33.95

b - Ice conditions.

WATERTON RIVER NEAR STAND OFF - STATION No. 5ADg

Location: Lat. 49° 30' 00", long. 113° 19' 30", in NE. 1/4 sec. 29, tp. 6, rge. 25, W. 4th Mer., Alberta, about three miles above confluence with Belly River. Drainage Area: 674 square miles (revised). Gauge: Wire-weight. Measurement of Discharge: From bridge or by wading. Period of Record: Periods of varying length November 1915 to October 1947 and continuous March 1948 to date. Prior to 4 May 1921 records were obtained in NW. 1/4 sec. 28. Average Discharge: (17 years) - 943 cfs, Extremes Recorded: Daily - Maximum, 6 June 1942, 15,750 cfs, Minimum, 1 and 2 March 1927, 0.0 cfs. Revisions: Drainage area, W.R.P. 50; 1936, 1939, 1952, W.R.P. 117; the meandaily discharge for 6 June 1942 and the maximum daily discharge for June 1942 have been corrected to 15,750 cfs. Remarks: Records good during open-water periods and fair during ice periods.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	320	1,120	248	288	129	282	478	637	3,480	1,450	602	269
2.....	341	926	248	282	168	248	777	706	3,630	1,380	592	265
3.....	369	832	248	294	148	209	962	866	3,750	1,350	554	261
4.....	390	777	248	306	132	334	1,750	998	3,960	1,300	527	257
5.....	425	726	248	288	118	369	2,580	1,080	4,220	1,220	480	257
6.....	383	686	218	288	100	454	574	1,290	4,000	1,300	445	254
7.....	348	666	243	248	96	376	1,320b	1,460	3,320	1,400	418	251
8.....	300	666	218	276	87	348	986	1,560	3,030	1,460	394	248
9.....	276	676	248	165	86	294	777	2,660	3,500	1,430	370	248
10.....	276	628	201	154	78	243	810	2,940	4,530	1,350	364	245
11.....	282	601	248	146	73	213	878	3,770	4,580	1,280	376	248
12.....	288	486	270	174	71	233	962	4,340	4,620	1,200	376	245
13.....	288	534	355	138	66	213	986	4,790	4,300	1,160	370	242
14.....	300	494	306	124	61	193	962	4,760	3,780	1,160	364	254
15.....	306	470	362	209	64	174	926	4,600	3,370	1,050	354	269
16.....	355	462	341	238	63	146	878	4,530	2,840	1,020	320	265
17.....	320	470	238	183	65	130	810	4,830	2,630	949	320	261
18.....	334	494	218	205	68	150	736	4,580	2,610	894	325	267
19.....	348	510	183	238	73	253	726	4,300	2,570	843	334	254
20.....	355	478	171	162	77	253	656	4,200	3,520	791	329	254
21.....	362	462	183	168	81	264	696	4,030	2,910	768	325	251
22.....	341b	470	168	146	86	306	726	4,300	2,670	744	320	248
23.....	248	478	168	168	97	258	706	4,430	2,430	804	311	251
24.....	201	446	205	174	114	233	656	4,600	2,070	791	307	248
25.....	209	418	238	189	142	205	637	4,740	2,020	779	307	245
26.....	341	355b	288	168	168	276	610	4,720	1,910	768	298	239
27.....	446	288	276	152	205	439	592	4,910	1,980	744	290	236
28.....	610	282	288	127	223	566	574	4,340	2,250	732	277	251
29.....	446	270	282	122	-	462	574	4,150	2,070	674	273	254
30.....	1,050	270	264	132	-	502	583	4,130	1,890	632	269	269
31.....	1,180b	-	300	130	-	248	-	4,090	-	592	269	-
Mean	388	548	249	196	105	286	863	3,462	3,148	1,033	370	253
Per sq. mi.	0.58	0.81	0.37	0.29	0.16	0.42	1.28	5.14	4.67	1.53	0.55	0.38
Acre-feet	23,880	32,610	15,310	12,060	5,830	17,600	51,350	212,900	187,300	63,500	22,730	15,070

The Year.....Discharge: Daily - Maximum 27 May, 4,910
 - Minimum 14 February, 61
 Mean 912; Per Square Mile 1.35
 Runoff: Acre-feet 660,100; Depth in inches on drainage area 18.36

b - Ice conditions 22 to 31 October and 26 November to 7 April.

(International Gauging Station)

Location: Lat. 48° 59' 50", long. 113° 54' 20", in NE. 1/4 sec. 3, tp. 37N, rge. 18 W, Montana, in Glacier Park, about one-quarter mile upstream from its outlet into the west side of Waterton Lake. Drainage Area: 21 square miles (6.8 square miles in Canada and 14.2 square miles in U.S.A.). Gauge: Recording. Measurement of Discharge: From cable-way or by wading. Period of Record: Continuous October 1947 to September 1957 and open water 1958. Average Discharge: (10 years) - 78.0 cfs. Extremes Recorded: Daily - Maximum, 4 June 1953, 737 cfs, Minimum, in March and April 1948, 4.0 cfs; Instantaneous Maximum - 5 a.m., 4 June 1953, 904 cfs. Revisions: Data to 1950 inclusive were reviewed in co-operation with the United States Geological Survey and no revisions were found necessary. Remarks: Records good. This station is maintained by the United States under agreement with Canada. Prior to October 1948, records were collected and published by the United States Geological Survey.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	16.8	-	-	-	-	-	-	-	267	95	51	24.8
2.....	18.4	-	-	-	-	-	-	-	245	85	49.0	23.6
3.....	-	-	-	-	-	-	-	-	227	80	48.0	22.2
4.....	-	-	-	-	-	-	-	-	317	73	44.8	20.3
5.....	-	-	-	-	-	-	-	-	284	72	42.4	19.0
6.....	-	-	-	-	-	-	-	-	254	79	40.0	17.9
7.....	-	-	-	-	-	-	-	-	240	80	38.4	17.4
8.....	-	-	-	-	-	-	-	-	230	80	38.4	16.8
9.....	-	-	-	-	-	-	-	-	264	82	38.4	16.8
10.....	-	-	-	-	-	-	-	-	349	80	38.4	17.4
11.....	-	-	-	-	-	-	-	-	279	80	40.0	17.9
12.....	-	-	-	-	-	-	-	-	235	84	40.8	20.3
13.....	-	-	-	-	-	-	-	-	206	82	38.4	26.8
14.....	-	-	-	-	-	-	-	-	186	78	35.2	29.4
15.....	-	-	-	-	-	-	-	-	178	69	33.6	26.8
16.....	-	-	-	-	-	-	-	-	174	64	32.0	23.6
17.....	-	-	-	-	-	-	-	305	171	62	31.4	28.1
18.....	-	-	-	-	-	-	-	296	169	62	30.7	29.4
19.....	-	-	-	-	-	-	-	293	176	60	30.7	42.4
20.....	-	-	-	-	-	-	-	336	181	62	30.7	48.0
21.....	-	-	-	-	-	-	-	388	164	62	30.0	44.8
22.....	-	-	-	-	-	-	-	403	153	64	30.7	41.6
23.....	-	-	-	-	-	-	-	407	155	72	30.7	38.4
24.....	-	-	-	-	-	-	-	411	153	62	30.0	36.8
25.....	-	-	-	-	-	-	-	395	140	57	29.4	36.0
26.....	-	-	-	-	-	-	-	391	127	54	28.8	32.0
27.....	-	-	-	-	-	-	-	373	136	51	30.7	30.7
28.....	-	-	-	-	-	-	-	366	198	50	34.4	31.4
29.....	-	-	-	-	-	-	-	359	146	50	31.4	32.0
30.....	-	-	-	-	-	-	-	320	113	50	28.8	30.7
31.....	-	-	-	-	-	-	-	282	-	51	26.2	-
Mean	-	-	-	-	-	-	-	-	204	68.8	35.6	28.1
Per sq. mi.	-	-	-	-	-	-	-	-	9.71	3.28	1.70	1.34
Acre-feet	-	-	-	-	-	-	-	-	12,130	4,230	2,190	1,670

The Period.....Discharge: Daily - Maximum 24 May, 411
 (122 days) Instantaneous Maximum 1 a.m., 24 May, 430
 Mean 83.6; Per Square Mile 3.98
 Runoff: Acre-feet 20,220; Depth in inches on drainage area 18.06

Location: Lat. 49° 18' 00", long. 114° 00' 10", in NE, 1/4 sec. 13, tp. 4, rge. 1, W. 5th Mer., Alberta, about one and one-half miles above main stem, fifteen miles above confluence with Waterton River and about seven miles west of Twin Butte on Pincher Creek-Waterton Highway. Drainage Area: 11.9 square miles (revised). Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: Part-year records 1935 to date. Prior to 1950, records were obtained from staff gauge near present location. Extremes Recorded: Daily - Maximum, 4 June 1953, 746 cfs, Minimum, 4 March 1954, 2.1 cfs (by discharge measurement under ice conditions). Published records for 1942 and earlier years show lower mean daily discharges but those records now considered unreliable. Instantaneous Maximum - 4 a.m., 4 June 1953, 1,020 cfs (by slope-area determination). Revisions: 1937, W.R.P. 117. Remarks: Records excellent during open-water period and fair during ice period.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	4b	4	22.9	81	31.8	17.8	7.5	6.4	-	-
2.....	-	-	4	4	43.4	75	30.7	17.0	6.7	6.4	-	-
3.....	-	-	4	5	53	75	29.7	16.2	6.7	6.1	-	-
4.....	-	-	4x	5	58	129	27.7	16.2	6.7	6.4	-	-
5.....	-	-	4x	5	58	142	25.7	15.5	6.7	6.1	-	-
6.....	-	-	4x	5x	62	116	43.4	14.8	6.1	6.7	-	-
7.....	-	-	4x	5 2	73	104	50	14.1	6.1	6.4	-	-
8.....	-	-	4	3.6	99	95	47.3	13.4	6.1	6.4	-	-
9.....	-	-	4	3.4	129	112	40.9	12.7	6.1	6.4	-	-
10.....	-	-	4x	3.8	147	147	37.3	12.7	6.4	6.4	-	-
11.....	-	-	4x	4.0	136	138	34.0	13.4	6.4	6.4	-	-
12.....	-	-	4	5.2	149	145	32.9	12.7	6.4	6.1	-	-
13.....	-	-	4	7.5	132	121	36.2	11.5	6.4	6.1	-	-
14.....	-	-	5	7.9	104	104	34.0	10.9	6.4	5.8	-	-
15.....	-	-	5	7.9	99	93	31.8	10.9	6.4	5.8	-	-
16.....	-	-	5	9.3	119	81	30.7	10.3	6.4	5.8	-	-
17.....	-	-	6	9.8	123	75	29.7	9.8	6.1	5.8	-	-
18.....	-	-	6	9.8	102	73	27.7	9.3	5.8	6.4	-	-
19.....	-	-	6x	9.8	93	93	25.7	8.8	6.7	6.4	-	-
20.....	-	-	6x	11.5	121	106	23.8	8.8	6.1	6.4	-	-
21.....	-	-	6	10.9	134	89	22.0	8.8	6.1	6.4	-	-
22.....	-	-	6	11.5	136	77	22.0	8.3	6.4	6.1	-	-
23.....	-	-	6x	10.9	138	70	31.8	7.9	6.7	5.8	-	-
24.....	-	-	4x	10.3	136	61	26.7	7.9	6.4	5.8	-	-
25.....	-	-	5x	11.5	136	54	25.7	7.5	6.4	6.1	-	-
26.....	-	-	5	10.3	127	46.0	25.7	7.1	6.1	6.1	-	-
27.....	-	-	5x	9.8	112	50	23.8	7.5	6.1	6.1	-	-
28.....	-	-	3x	9.3	116	42.1	22.9	7.5	6.1	6.1	-	-
29.....	-	-	4	9.8	119	39.7	22.9	7.1	6.4	6.1	-	-
30.....	-	-	4x	10.9	104	34.0	22.0	7.9	6.4	5.8	-	-
31.....	-	-	4	-	91	-	19.4	6.7	-	5.8	-	-
Mean	-	-	4.61	6.73	109	88.9	30.2	11.0	6.38	6.16	-	-
Per sq. mi.	-	-	0.39	0.57	9.16	7.47	2.54	0.92	0.54	0.52	-	-
Acre-feet	-	-	284	401	6,490	5,290	1,860	676	379	379	-	-

The Period.....Discharge: Daily - Maximum 12 May, 149

(245 days) - Minimum 28 March, 3

Instantaneous Maximum 2 p.m., 12 May, 160

Mean 32.4; Per Square Mile 2.72

Runoff: Acre-feet 15,760; Depth in inches on drainage area 24.33

b - Ice conditions 1 March to 7 April.

x - Staff gauge readings.

MISCELLANEOUS DISCHARGE MEASUREMENTS MADE IN WATERTON RIVER TRIBUTARY BASIN
FOR WATER YEAR 1957-58

247

Date	Stream	Location	Discharge cfs
<u>1957</u>			
13 Nov.	Crooked Creek	Near Waterton Park	10.5
28 Nov.	"	"	7.3
<u>1958</u>			
8 May	"	"	21.3
16 May	"	"	37.7
28 May	"	"	21.6
25 June	"	"	36.4
16 July	"	"	25.8

ST. MARY RIVER AT INTERNATIONAL BOUNDARY - STATION No. 5AE₂₇

(International Gauging Station)

Location: Lat. 49° 00' 10", long. 113° 18' 50", in SW. 1/4 sec. 5, tp. 1, rge. 25, W. 4th Mer., Alberta, about one-quarter of a mile north of International Boundary. Drainage Area: 470 square miles. Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: September 1902 to date. Records were collected by manual gauge at the present site by the United States Geological Survey from 1902 to 1912 and published under the title "at Cook's Ranch". Records from 1913 to 25 October 1955 were collected at sites about nine miles downstream and published under the title "at" or "near Kimball" before 1917 and "near International Boundary" thereafter. Average Discharge: (56 years) - 783 cfs. Extremes Recorded: Daily - Maximum, 5 June 1908, 28,000 cfs, Minimum, 29 November 1936, 16 cfs; Instantaneous Maximum - 5 June 1908, 40,000 cfs. Revisions: Data to 1950 inclusive were reviewed in co-operation with the United States Geological Survey and revised data are available upon application to the District Engineer at Calgary, for address see page 8. Remarks: Records excellent during open-water periods and fair during ice period. This is one of a number of stations which are maintained jointly by Canada and the United States. Water stored in Lake Sherburne above the station or diverted for irrigation purposes by the United States St. Mary Canal since 1917.

Daily Discharge in Cubic Feet per Second for Water Year: 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	198	378	175	90	90	110	202	354	2,010	1,230	626	300
2.....	202	366	165	95	105	120	206	384	2,130	1,140	602	275
3.....	198	354	165	80	110	110	198	366	2,130	1,030	602	260
4.....	206	344	165	75	95	150	214	434	2,370	924	570	246
5.....	206	338	165	65	90	145	202	514	2,410	830	538	228
6.....	206	349	180	70	75	130	202	602	2,320	782	514	214
7.....	210	332	190	75	75	140	214	802	2,270	735	490	198
8.....	210	327	160	70	70	135	306	1,010	2,210	735	476	178
9.....	210	310	135	70	80	130	322	1,280	2,290	718	462	194
10.....	210	310	165	70	85	140	290	1,560	3,010	735	448	214
11.....	210	300	165	60	90	140	295	1,840	3,010	764	441	242
12.....	210	349	145	60	70	130	310	2,250	3,160	773	434	270
13.....	210	280	140	50	70	100	305	2,520	2,950	782	434	327
14.....	210	275	130	50	70	105	295	2,460	2,550	802	420	344
15.....	214	255	140	50	95	110	275	2,250	2,240	792	420	372
16.....	219	250	150	55	125	125	270	2,110	1,940	735	408	408
17.....	224	250b	135	55	150	130	275	2,060	1,660	701	390	414
18.....	275	245	150	70	140	140	295	1,980	1,550	676	378	506
19.....	280	240	155	70	140	155	295	1,900	1,790	650	372	578
20.....	280	240	145	75	140	180	310	1,890	2,220	642	378	530
21.....	285	230	150	80	140	160	327	1,920	2,240	642	354	506
22.....	285	240	125	90	160	150b	354	2,080	2,050	618	354	483
23.....	305	200	140	90	150	145	360	2,210	1,830	642	338	490
24.....	280	180	150	95	150	152	338	2,290	1,650	650	322	506
25.....	255	175	145	95	150	145	300	2,320	1,490	626	316	490
26.....	260	170	140	95	120	148	344	2,320	1,390	642	310	469
27.....	265	165	130	85	100	156	366	2,330	1,370	634	310	448
28.....	260	185	130	90	110	178	349	2,300	1,550	626	332	434
29.....	270	165	130	95	-	186	280	2,270	1,460	618	327	420
30.....	390	165	120	95	-	202	316	2,210	1,340	735	332	414
31.....	414	-	110	95	-	190	-	2,080	-	676	310	-
Mean	247	266	148	76.1	109	143	287	1,706	2,086	751	420	365
Per sq.mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	15,190	15,800	9,100	4,680	6,040	8,800	17,090	104,900	124,100	46,190	25,800	21,730

The Year..... Discharge: Daily - Maximum 12 June, 3,160
 - Minimum 13 to 15 January, 50
 Instantaneous Maximum 8 a.m. to 2 p.m., 12 June, 3,200
 Mean 552
 Runoff: Acre-feet 399,400

b - Ice conditions 17 November to 22 March.

Location: Lat. 49° 34', long. 112° 50', in SE. 1/4 sec. 19, tp. 7, rge. 21, W. 4th Mer., Alberta, at Russell's ranch immediately below mouth of Pothole Creek, nine miles south of Lethbridge, and six miles by river above confluence with Oldman River. Drainage Area: 1,410 square miles (revised). Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period or Record: October 1911 to September 1917, November 1917 to July 1918 and November 1918 to December 1932 and March 1933 to date. Prior to November 1918, the station was located about two miles downstream. Prior to 1917, records were published under the title "at Whitney's Ranch". Recorder established on 8 June 1915 to replace former staff gauge. Average Discharge: (44 years) - 648 cfs. Extremes Recorded: Daily - Maximum, (Regulated) 4 June 1953, 14,400 cfs, Minimum, (Regulated) at various times, 0 cfs; Instantaneous Maximum - at noon, 4 June 1953, 15,600 cfs (by slope-area determination). Revisions: December 1911, January, February, March, April and August 1912, October and November 1913, and April 1914 revised data can be obtained upon application to the District Engineer at Calgary, for address see page 8; November 1916, 1917 Report; 1921, 1926, 1934, W.R.P. 117; 1948, W.R.P. 121. Remarks: Records excellent during open-water periods and fair during ice period.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	240	260	34	14	2	16	666	52e	63	1,040	125	47.0
2.....	248	221	32	13	4	18	804	48e	66	996	120	41.0
3.....	260	210	28	13	4	19	741b	44e	63	950	117	42.0
4.....	271	207	23	12	5	18	1,100	40e	66	913	114	39.0
5.....	256	210	22	10	5	16	1,650	36e	65	872	109	34.9
6.....	260	210	21	10	4	14	1,710	32e	63	824	106	28.2
7.....	256	207	21	10	3	12	1,560	27.0	76	784	106	35.6
8.....	256	264	20	10	2	12	1,490	27.6	101	390	103	35.6
9.....	252	345	20	8	4	13	1,450	28.2	85	248	101	39.0
10.....	256	336	19	6	4	14	1,280	26.4	87	241	103	36.3
11.....	256	341	18	3	5	13	1,290	27.6	1,200	225	109	36.3
12.....	244	336	18	1	5	12	1,270	32.8	2,890	207	112	35.6
13.....	237	341	17	2	4	12	1,240	44.0	3,130	241	109	34.9
14.....	233	349	16	3	3	12	1,210	44.0	3,020	237	103	46.0
15.....	237	349	16	4	2	12	1,120	36.3	2,890	214	106	47.0
16.....	240	345	15	4	3	13	728	37.0	2,580	192	103	45.0
17.....	244	349	14x	4	3	12	656	33.5	395	185	98	44.0
18.....	271	353	14	2	2	10	406	33.5	218	178	96	44.0
19.....	291	357	18	2	2	9	114	31.4	214	171	96	48.3
20.....	260	345	14	2	2	19	83	33.5	739	168	91	46.0
21.....	252	324	14	2	3	28	78	34.9	1,120	151	89	40.0
22.....	194b	374	10	3	11	38	83	35.6	1,180	144	91	38.0
23.....	216	345	11	3	8	52	71	41.0	1,220	171	96	45.0
24.....	362	328	13	4	9	82	73e	52	1,230	154	91	51
25.....	489	320	14	6	11	111	75e	57	1,210	141	87	54
26.....	505	320	12	4	12	141	76e	40.0	1,190	154	87	48.3
27.....	464	332	10	5	14	170	78	40.0	1,180	147	83	43.0
28.....	441	183	9	5	15	200x	78	42.0	1,180	154	94	38.0
29.....	418	42	7	6	-	229	60	43.0	1,130	171	103	37.0
30.....	423	31	9	5	-	388	56e	43.0	1,080	147	85	41.0
31.....	401	-	12	3	-	510	-	47.0	-	131	62	-
Mean	298	284	16.8	5.77	5.39	71.8	710	38.4	991	353	99.8	41.4
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	18,310	16,930	1,030	355	300	4,410	42,240	2,360	58,970	21,700	6,140	2,460

The Year..... Discharge: Daily - Maximum 13 June, 3,130
 - Minimum 12 January, 1
 Instantaneous Maximum 5 p.m., 12 June, 3,320
 Mean 242
 Runoff: Acre-feet 175,200

b - Ice conditions 22 October to 3 April. e - Estimated.
 x - Staff gauge readings 17 December to 28 March.

(International Gauging Station)

Location: Lat. 48° 48' 10", long. 113° 39' 20" (corrected), in SE. 1/4 sec. 11, tp. 35 N., rge. 16 W., Montana, at outlet of Swiftcurrent Lake and about one-quarter mile above head of Lake Sherburne in Glacier Park. Drainage Area: 31.4 square miles. Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: Periods of varying length 1912 to date. Recorder established on 16 June 1918 to replace former staff gauges near same location. Extremes Recorded: Daily - Maximum, 13 June 1937, 1,780 cfs, Minimum, 14 and 15 March 1940, 9.6 cfs; Instantaneous Maximum - 3:30 p.m., 13 June 1937, 2,250 cfs. Revisions: Data to 1950 inclusive were reviewed in co-operation with the United States Geological Survey and revised data are available upon application to the District Engineer at Calgary, for address see page 8. Remarks: Records excellent during open-water periods and fair during ice period. This is one of a number of stations which are maintained jointly by the United States and Canada. Records prior to June 1921 were collected and published by the United States Geological Survey.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	41.0	-	-	-	-	50b	27.2	63	495	230	140	57
2.....	48.2	-	-	-	-	40	27.2	176	466	202	140	52
3.....	62	-	-	-	-	35x	27.2	196	413	190	138	52
4.....	65	-	-	-	-	32	30.2	248	488	178	118	49.0
5.....	56	-	-	-	-	29x	30.2	290	516	173	108	43.3
6.....	53	-	-	-	-	28	29.2	320	473	164	102	42.0
7.....	49.7	-	-	-	-	27	28.2	392	441	162	100	42.0
8.....	46.7	-	-	-	-	26x	31.3	491	410	170	98	42.0
9.....	42.4	-	-	-	-	25	34.6	605	406	196	102	44.7
10.....	41.0	-	-	-	-	24x	38.2	793	628	208	104	47.5
11.....	43.8	-	-	-	-	23	39.4	757	550	208	106	47.5
12.....	46.7	-	-	-	-	22x	40.7	713	448	208	108	57
13.....	49.7	-	-	-	-	21	52	624	382	205	106	85
14.....	55	-	-	-	-	21	102	462	334	190	100	106
15.....	63	-	-	-	-	20x	125	410	324	159	96	111
16.....	63	-	-	-	-	20b	130	509	330	138	89	104
17.....	62	-	-	-	-	19.4x	120	598	330	133	85	118
18.....	75	-	-	-	-	19.4e	146	542	330	140	85	135
19.....	65	-	-	-	-	19.4	128	491	364	143	85	175
20.....	56	-	-	-	-	19.0e	118	531	396	146	87	248
21.....	53	-	-	-	-	18.7	106	674	358	159	85	217
22.....	51	-	-	-	-	20.2	98	686	317	159	83	178
23.....	46.7	-	-	-	-	21.8	83	686	320	167	81	162
24.....	45.2	-	-	-	-	22.6	72	693	334	151	79	156
25.....	45.2	-	-	-	-	23.5	63	690	320	128	79	135
26.....	46.7	-	-	-	-	24.4	62	717	277	128	79	118
27.....	55	-	-	-	-	24.4	57	651	297	125	74	113
28.....	56	-	-	-	-	25.3	54	605	410	118	79	116
29.....	58	-	-	-	-	26.2	49.0	636	337	118	79	130
30.....	79	-	-	-	-	26.2	50	598	271	128	70	128
31.....	134	-	-	-	-	27.2	-	527	-	138	65	-
Mean	56.6	-	-	-	-	25.2	66.6	526	392	163	95.2	104
Per sq. mi.	1.80	-	-	-	-	0.80	2.12	16.75	12.48	5.19	3.03	3.31
Acre-feet	3,480	-	-	-	-	1,550	3,960	32,360	23,340	10,040	5,850	6,170

The Period.... Discharge: Daily - Maximum 10 May, 793
(245 days) - Minimum 21 March, 18.7

Instantaneous Maximum 5 to 6 p.m., 10 May, 834
Mean 179; Per Square Mile 5.70

Runoff: Acre-feet 86,750; Depth in inches on drainage area 51.80

x - Staff gauge readings.

e - Estimated.

b - Ice conditions 1 to 16 March.

(International Gauging Station)

Location: Lat. 48° 50', long. 113° 30' 50", in SW. 1/4 sec. 36, tp. 36 N., rge. 15 W., Montana, at outlet of Lake Sherburne and about six miles above confluence with St. Mary River. Drainage Area: 64.3 square miles. Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: Continuous February 1916 to October 1923; mainly open water 1912 to 1915 and 1924 to date. Records prior to 18 May 1921 obtained from staff gauges in the vicinity. Average Discharge: (7 years) - 200 cfs. Extremes Recorded: Daily - Maximum, 17 June 1916, 2,250 cfs, Minimum, (Regulated) Nil at various times. Revisions: Data to 1950 inclusive were reviewed in co-operation with the United States Geological Survey and revised data are available upon application to the District Engineer at Calgary, for address see page 8. May 1952 revised data may also be obtained from the Calgary District office. Remarks: Records excellent. This is one of a number of stations which are maintained jointly by the United States and Canada. Prior to June 1921, records were obtained and published by the United States Geological Survey. The stream is controlled at Lake Sherburne above this station.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	0.0x	-	-	-	-	-	0.2e	370	342	391	625	562
2.....	0.0e	-	-	-	-	-	0.2e	404x	530	336	647	556
3.....		-	-	-	-	-	0.2x	448	497	300	644	549
4.....		-	-	-	-	-	0.2x	450	497	234	640	549
5.....		-	-	-	-	-	0.2e	491	500	210	636	543
6.....		-	-	-	-	-	0.3e	593	500	210	640	534
7.....	0.0e	-	-	-	-	-	0.3x	647	500	210	651	515
8.....		-	-	-	-	-	0.3e	640	503	210	647	515
9.....		-	-	-	-	-	0.3x	524	506	212	640	579
10.....		-	-	-	-	-	0.3e	468	654	419	640	590
11.....		-	-	-	-	-	0.3x	417	947	527	636	553
12.....	0.1e	-	-	-	-	-	0.7e	368	910	524	647	512
13.....		-	-	-	-	-	1.0e	324	710	524	655	473
14.....		-	-	-	-	-	1.4e	250	482	524	655	402
15.....		-	-	-	-	-	1.8x	112	418	524	644	267
16.....		-	-	-	-	-	2.2x	112	177	524	640	204
17.....	0.1e	-	-	-	-	-	1.8x	34.6	131	540	629	177
18.....		-	-	-	-	0.4x	1.8e	1.8	252	553	629	169
19.....		-	-	-	-	0.4x	1.9e	1.6	389	549	614	70
20.....		-	-	-	-	-	2.0e	1.5	928	546	610	1.5
21.....		-	-	-	-	-	2.0x	1.4	658	543	600	0.9
22.....	0.1x	-	-	-	-	-	2.0x	1.4	530	582	593	0.4
23.....		-	-	-	-	-	111	1.3	448	604	582	0.4
24.....		-	-	-	-	-	176	1.2	393	600	576	0.3
25.....		-	-	-	-	0.3e	205	1.2	391	596	593	0.2
26.....		-	-	-	-	-	218	1.1	391	629	618	0.2
27.....	0.2e	-	-	-	-	-	218	0.8x	391	644	632	0.2
28.....	0.2e	-	-	-	-	-	269	0.8	391	640	614	0.2
29.....	0.2e	-	-	-	-	-	314	0.8	391	636	604	0.2
30.....	0.2x	-	-	-	-	-	348	0.8	388	625	590	0.2
31.....	0.2x	-	-	-	-	-	-	0.8	-	625	576	-
Mean	0.08e	-	-	-	-	-	62.7e	215	492	477	624	277
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	4.8	-	-	-	-	-	3,730	13,230	29,250	29,340	38,370	16,510

The Period..... Discharge: Daily - Maximum 11 June, 947
 (214 days) - Minimum at various times, 0.0
 Instantaneous Maximum 11 p.m., 19 June, 1,070
 Mean 307
 Runoff: Acre-feet 130,400

e - Estimated. x - Staff gauge readings 2 to 27 May and as indicated.
 Gauge heights from graph of observed readings and partial recorder chart record, 2 to 27 May.

SWIFTCURRENT CREEK AT SHERBURNE, MONTANA

Monthly Discharge for Water Year 1957-58

Month	Cfs days	Observed				Change in contents in Lake Sherburne Acre-feet	Adjusted for change in reservoir contents				
		Discharge in cfs			Runoff in Acre-feet		Runoff in Acre- feet	Discharge in cfs			Runoff in inches
		Max.	Min.	Mean				Cfs days	Mean	Per Square Mile	
October.....	2.4	0.2	0.0	0.08e	4.8e	+ 5,470	5,470	2,758	89.0	1.38	1.60
November.....	-	-	-	-	-	-	-	-	-	-	-
December.....	-	-	-	-	-	-	-	-	-	-	-
January.....	-	-	-	-	-	-	-	-	-	-	-
February.....	-	-	-	-	-	-	-	-	-	-	-
March.....	-	-	-	-	-	-	-	-	-	-	-
April	1,880.4	348	0.2	62.7	3,730	+ 2,920	6,650	3,353	112	1.74	1.94
May.....	6,669.1	647	0.8	215	13,230	+31,360	44,590	22,481	725	11.28	13.00
June	14,745	947	131	492	29,250	+ 4,090	33,340	16,809	560	8.71	9.72
July.....	14,791	644	210	477	29,340	-15,040	14,300	7,210	233	3.62	4.17
August.....	19,347	655	576	624	38,370	-30,660	7,710	3,887	125	1.94	2.25
September	8,323.7	590	0.2	277	16,510	- 8,160	8,350	4,210	140	2.18	2.43

Location: Lat. 49° 07', long. 113° 08', in NW. 1/4 sec. 15, tp. 2, rge. 24, W. 4th Mer., Alberta, about three miles above confluence with St. Mary River. **Drainage Area:** 91 square miles (revised). **Gauge:** Staff. **Measurement of Discharge:** From bridge or by wading. **Period of Record:** Mainly March to October, 1911 to 1916 and 1935 to date; gauge heights only during April to July 1917. Prior to 1935, records were obtained about one-half mile below present site. **Extremes Recorded:** Daily - Maximum, 9 June 1953, 962 cfs (estimated), Minimum, Nil at various times; Instantaneous Maximum - about 6 p.m., 3 June 1953 (from high water mark), 1,290 cfs. **Revisions:** September and October 1913 revised data can be obtained upon application to the District Engineer at Calgary, for address see page 8. August 1915 and April 1938 mean discharges have been corrected to 31.5 and 24.4 cfs, respectively. **Remarks:** Records fair. Records for periods of varying length were obtained near Taylorville 1917 to 1920 and at Jensen and Powell Ranch (later Vaughn's Ranch) 1919 to 1930, none of which are considered comparable to those at present site.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	b	47	158	14.9	7.8	6.8	10.3	3.5	3.7	-	-
2.....	-		11	132	13.6	7.5	6.8	9.2	3.9	3.0	-	-
3.....	-		11	111	11.9	7.5	6.5	9.9	4.7	2.6	-	-
4.....	-		9	131b	10.3	7.5	5.6	10.7	4.4	2.6	-	-
5.....	-		3	110	9.5	10.3	5.6	10.3	5.0	2.4	-	-
6.....	-	0e	2	114	9.5	11.1	7.1	13.6	6.8	1.3	-	-
7.....	-		3	117	8.5	11.1	7.8	15.8	6.2	1.2	-	-
8.....	-		7	117	8.1	9.2	7.5	16.2	5.9	1.1	-	-
9.....	-		9	108	6.5	10.3	10.3	14.9	5.6	1.0	-	-
10.....	-		7	109	6.5	10.3	7.5	14.9	5.6	1.2	-	-
11.....	-		6	105	6.2	11.5	8.5	15.4	5.3	1.4	-	-
12.....	-		5	87	15.8	11.5	9.9	16.2	5.0	1.2	-	-
13.....	-		5	84	23.3	11.5	9.5	14.5	4.7	1.7	-	-
14.....	-		4	72	27.5	12.3	8.8	13.6	5.6	2.4	-	-
15.....	-		3	57	23.3	12.3	9.2	13.2	5.3	2.2	-	-
16.....	-		2	48	16.2	8.8	6.2	13.6	5.3	1.9	-	-
17.....	-		1	34.5	11.1	7.8	3.9	14.1	5.0	1.7	-	-
18.....	-		1	27.5	8.5	9.9	5.3	13.6	4.7	1.7	-	-
19.....	-		1	21.4	7.8	11.1	3.9	11.9	4.4	1.7	-	-
20.....	-		1	19.0	6.8	14.5	4.2	12.8	4.2	2.2	-	-
21.....	-		30	1	14.9	5.0	15.4	8.1	11.5	3.9	2.0	-
22.....	-		33	1	14.9	5.0	16.2	8.1	10.7	3.9	1.9	-
23.....	-		36	1	13.6	4.7	13.6	8.5	8.5	3.5	1.7	-
24.....	-		22	1	13.2	5.3	11.9	19.0	7.1	4.2	1.6	-
25.....	-		23	1	11.9	5.0	9.5	19.5	5.6	4.7	1.4	-
26.....	-	136	30	10.7	5.0	6.8	21.4	5.9	5.0	1.3	-	-
27.....	-	9	70	10.7	5.6	5.6	20.9	4.7	6.5	1.2	-	-
28.....	-	13	60	13.6	4.4	5.6	23.8	4.2	5.0	1.1	-	-
29.....	-	-	53	16.2	5.6	5.6	20.4	4.2	4.7	1.0	-	-
30.....	-	-	111	16.2	5.3	6.8	15.8	3.9	5.0	1.2	-	-
31.....	-	-	150	-	5.6	-	11.9	3.7	-	1.4	-	-
Mean	-	10.8e	19.9	63.3	9.75	10.0	10.3	10.8	4.92	1.74	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	599	1,220	3,770	600	597	631	664	293	107	-	-

The Period..... Discharge: Daily - Maximum 1 April, 158
 (273 days) - Minimum at various times, 0
 Instantaneous Maximum about 11 p.m., 1 April, 234
 Mean 15.7
 Runoff: Acre-feet 8,480

b - Ice conditions 1 February to 4 April. e - Estimated.
 Gauge heights from graph of observed readings 31 March to 4 April.

Location: Lat. 49° 12' 00", long. 113° 17' 45" (corrected), in NW, 1/4 sec. 10, tp. 3, rge. 25, W. 4th Mer., Alberta, upstream from St. Mary River Reservoir and two miles above confluence with St. Mary River. Drainage Area: 117 square miles (revised). Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: Periods of varying length, 1909 to 1914; continuous August 1920 to date. Recorder established in August 1956. Former records obtained by staff or chain gauges at various sites near present location. Average Discharge: (39 years) - 61.9 cfs. Extremes Recorded: Daily - Maximum, 17 June 1948, 4,580 cfs, Minimum, at various times, 0.0 cfs; Instantaneous Maximum - about 5 p.m., 24 June 1951, 7,820 cfs. Revisions: Drainage area, W.R.P. 57; August and September 1910 meandischarges were published in error in the 1910 Report and should be 6.9 and 63.6 cfs, respectively; July 1913 mean discharge has been corrected to 75.5 cfs; 1926, W.R.P. 117. Runoff for water year 1930-31 has been corrected to 1.85 inches on drainage basin. Remarks: Records excellent except during ice period when they are fair. From May 1913 to July 1920 records for this stream were obtained at B. Layton's Ranch, six miles above Cardston.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	10.4	86	12	17	6	16	90	106	128	125	54	14.9
2.....	11.4	62	9	19	9	14	86	136	125	128	50	14.5
3.....	15.2	35.6	8	22	13	8	90	152	128	122	45.3	16.4
4.....	19.0	49.4	7	20	23	12	98b	159	221	112	42.1	16.9
5.....	18.2	47.8	6	15	19	20	75	159	229	106	40.6	15.9
6.....	17.4	40.5	6	10	7	22	79	156	187	131	37.6	14.5
7.....	15.2	31.3	6	8	4	9	100	156	180	148	34.8	14.1
8.....	14.5	26b	8	9	4	9	145	162	191	120	32.1	12.9
9.....	13.8	33	9	8	11	15	169	183	180	122	29.6	12.5
10.....	13.1	34b	6	8	6	11	152	198	412	122	27.3	12.9
11.....	13.8	36.7	6	10	5	9	169	198	344	106	27.3	12.1
12.....	13.8	34.5	18	7	6	10	180	254	353	102	28.4	11.7
13.....	15.9	30.2	22	8	7	9	198	332	291	104	27.3	12.9
14.....	18.2	28.2	17	7	9	8	183	233	232	117	25.3	13.3
15.....	19.0	25b	12	11	12	7	149	191	211	112	23.5	14.1
16.....	18.2	23	9	20	12	7	130	180	200	96	21.8	13.3
17.....	16.6	24	18	23	11	10	113	176	183	84	20.2	12.9
18.....	25.3	22	17	10	5	10	113	159	204	79	19.5	12.5
19.....	28.2	15	10	6	6	10	98	145	346	75	21.0	12.5
20.....	26.3	12	10	6	7	15	96	145	404	68	22.6	13.7
21.....	25.3	11	15	21	6	25	98	142	301	68	21.8	13.7
22.....	20b	14	12	27	30	30	98	139	262	60	21.0	12.9
23.....	22	33	8	23	73	18	88	136	218	73	21.0	16.9
24.....	21	37b	7	22	40	20	77	130	193	75	20.2	18.1
25.....	34	35.6	8	13	38	23	75	125	180	64	19.5	16.4
26.....	36	28.2	25	5	17	23	77	119	158	70	16.9	15.9
27.....	34	9b	23	5	21	24	77	110	161	75	16.9	15.4
28.....	34b	12	22	9	26	40	84	103	204	75	21.0	14.5
29.....	46.3	12	22	20	-	88	81	96	151	66	21.0	14.5
30.....	93	15	15	14	-	122	84	90	134	73	18.8	15.4
31.....	136	-	18	9	-	108	-	108	-	66	16.9	-
Mean	27.3	30.1	12.6	13.3	15.5	24.3	112	157	224	95.0	27.3	14.3
Per sq. mi.	0.23	0.26	0.11	0.11	0.13	0.21	0.96	1.34	1.91	0.81	0.23	0.12
Acre-feet	1,680	1,790	776	817	859	1,490	6,650	9,680	13,310	5,840	1,680	849

The Year..... Discharge: Daily - Maximum 10 June, 412
 - Minimum 7 and 8 February, 4
 Instantaneous Maximum 7 a.m., 10 June, 546
 Mean 62.7; Per Square Mile 0.54
 Runoff: Acre-feet 45,410; Depth in inches on drainage area 7.28

b - Ice conditions 22 to 28 October, 8 to 10, 15 to 24 and 27 November to 4 April.

(International Gauging Station)

Source: St. Mary River. Location: Lat. 48° 56' 50", long. 113° 22' 30", in SW. 1/4 sec. 19, tp. 37 N., rge. 13 W., Montana, fifty feet above the St. Mary River Siphon, about nine miles below headgate and seven miles northeast of Babb. Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: Irrigation seasons 1918 to date. Prior to 1951 records were obtained at a location immediately below the St. Mary River Siphon. Extremes Recorded: Daily - Maximum, 19 and 28 June 1936, 767 cfs; Instantaneous Maximum - 9:30 p.m., 31 May 1936, 794 cfs. Revisions: Data to 1950 inclusive were reviewed in co-operation with the United States Geological Survey and no revisions were found necessary. Remarks: Records excellent. This is one of a number of stations which are maintained jointly by the United States and Canada. The discharge recorded at this station is the quantity which is considered as diverted from the St. Mary River in the United States for delivery to the Milk River basin. Losses in the canal above this station are considered to return to St. Mary River.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	Nil	323	652	635	642	618	Nil	-	-
2.....	-	-	-	"	336	655	630	640	611	"	-	-
3.....	-	-	-	"	407	655	626	640	611	"	-	-
4.....	-	-	-	"	414	652	621	640	609	"	-	-
5.....	-	-	-	"	429	648	614	640	604	"	-	-
6.....	-	-	-	"	491	648	609	635	599	"	-	-
7.....	-	-	-	"	521	650	606	633	594	"	-	-
8.....	-	-	-	"	562	650	614	633	585	"	-	-
9.....	-	-	-	"	597	652	642	630	571	"	-	-
10.....	-	-	-	"	623	655	645	628	567	"	-	-
11.....	-	-	-	"	635	652	648	628	551	"	-	-
12.....	-	-	-	"	652	650	652	628	527	"	-	-
13.....	-	-	-	"	648	642	655	628	479	"	-	-
14.....	-	-	-	"	645	638	655	628	440	"	-	-
15.....	-	-	-	"	645	635	655	626	362	"	-	-
16.....	-	-	-	"	648	628	652	623	260	"	-	-
17.....	-	-	-	"	648	628	650	621	210	"	-	-
18.....	-	-	-	"	645	630	648	621	104	"	-	-
19.....	-	-	-	"	645	642	648	618	12.8	"	-	-
20.....	-	-	-	"	645	623	645	618	5.7	"	-	-
21.....	-	-	-	"	645	618	645	616	5.4	"	-	-
22.....	-	-	-	"	648	616	642	616	3.3	"	-	-
23.....	-	-	-	"	652	616	645	616	0.9	"	-	-
24.....	-	-	-	54	655	616	645	614	0.2	"	-	-
25.....	-	-	-	145	658	623	645	614	0.0	"	-	-
26.....	-	-	-	154	658	633	645	614	Nil	"	-	-
27.....	-	-	-	166	658	638	645	614	"	"	-	-
28.....	-	-	-	202	658	645	642	618	"	"	-	-
29.....	-	-	-	310	652	640	642	618	"	"	-	-
30.....	-	-	-	318	652	638	648	618	"	"	-	-
31.....	-	-	-	-	652	-	645	616	-	"	-	-
Mean	-	-	-	45.0	592	639	640	625	298	Nil	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	-	2,680	36,390	38,020	39,350	38,430	17,710	Nil	-	-

The Period..... Discharge: Daily - Maximum 25 May, 658
 (214 days) Instantaneous Maximum 3:15 p.m., 28 June, 665
 Runoff: Acre-feet 172,600

(International Gauging Station)

Source: St. Mary River. Location: Lat. 48° 59', long. 113° 04', in sec. 5, tp. 37 N., rge. 11 W., Montana, about twenty-five miles below canal headgate and immediately above Drop No. 1 and about two miles above outlet into North Branch of Milk River. Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: Irrigation seasons 1917 to date. Records obtained from staff gauge one mile upstream prior to 1919 and prior to June 1930 by recorder at locations near present site. Extremes Recorded: Daily - Maximum, 13 June 1937, 758 cfs; Instantaneous Maximum - 3 to 8 a.m., 13 June 1937, 767 cfs. Revisions: Data to 1950 inclusive were reviewed in co-operation with the United States Geological Survey and no revisions were found necessary. Remarks: Records excellent. This is one of a number of stations which are maintained jointly by the United States and Canada. Records for 1917 were collected and published by the United States Geological Survey. This station records the water actually delivered to the Milk River basin by diversion from the St. Mary River in the United States.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	5e	315	642	615	620	598	Nil	-	-
2.....	-	-	-		316	634	612	617	586	"	-	-
3.....	-	-	-		361	637	610	617	591	"	-	-
4.....	-	-	-		394	642	605	615	586	"	-	-
5.....	-	-	-		405	632	598	612	583	"	-	-
6.....	-	-	-	10.2	442	622	598	610	579	"	-	-
7.....	-	-	-		483	632	595	607	576	"	-	-
8.....	-	-	-		525	630	586	610	571	"	-	-
9.....	-	-	-		560	630	610	607	560	"	-	-
10.....	-	-	-		591	634	624	605	548	"	-	-
11.....	-	-	-	8.5	607	634	622	603	541	"	-	-
12.....	-	-	-	11.1	637	637	630	603	532	"	-	-
13.....	-	-	-	12.7	642	630	630	603	494	"	-	-
14.....	-	-	-	7.1	630	622	632	603	458	"	-	-
15.....	-	-	-	3.5	634	617	632	603	392	"	-	-
16.....	-	-	-	1.8	634	612	630	603	319	"	-	-
17.....	-	-	-	0.9	630	607	624	600	254	"	-	-
18.....	-	-	-	1.1	630	612	624	598	177	"	-	-
19.....	-	-	-	0.6	630	630	624	598	94	"	-	-
20.....	-	-	-	0.3	630	624	624	600	34.6	"	-	-
21.....	-	-	-	0.1	627	603	622	598	18.4	"	-	-
22.....	-	-	-	0.0	630	598	617	593	9.2	"	-	-
23.....	-	-	-	0.1	630	595	624	593	4.7	"	-	-
24.....	-	-	-	0.0	634	595	624	593	1.5	"	-	-
25.....	-	-	-	49.9	637	598	622	593	0.6	"	-	-
26.....	-	-	-	146	634	607	624	593	Nil	"	-	-
27.....	-	-	-	157	637	617	624	588	"	"	-	-
28.....	-	-	-	168	640	640	624	593	"	"	-	-
29.....	-	-	-	245	634	615	620	593	"	"	-	-
30.....	-	-	-	305	634	620	624	593	"	"	-	-
31.....	-	-	-	-	637	-	624	593	-	"	-	-
Mean	-	-	-	39.1	570	622	619	602	304	Nil	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	-	2,330	35,050	36,990	38,030	37,010	18,070	Nil	-	-

The Period..... Discharge: Daily - Maximum 13 May and 1 June, 642
 (214 days) Instantaneous Maximum 10 a.m., 28 June, 677
 Runoff: Acre-feet 167,500

e - Estimated.

Source: St. Mary Reservoir. Location: Lat. 49° 21', long. 113° 03', in NW. 1/4 sec. 33, tp. 4, rge. 23, W. 4th Mer., Alberta, about three miles below St. Mary Reservoir, three-quarters of a mile below Magrath Irrigation District Canal headgate, one-half mile northeast of Spring Coulee, three-quarters of a mile below Pinepound Creek siphon and immediately above drop structure. Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: Irrigation seasons 1952 to date. Extremes Recorded: Daily - Maximum, 5 and 6 June 1957, 2,520 cfs; Instantaneous Maximum - 7 p.m., 6 June 1957, 2,540 cfs. Remarks: Records good. The canal was completed in 1952. Records on former Canadian diversion from the St. Mary River were collected at the Canadian St. Mary Canal at Kimball. To obtain total diversion from St. Mary Reservoir the discharge in Magrath Irrigation District Canal, No. 5AE₂₁, must be added to the discharge at this station.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	0.3e	0.0	1,030	777	1,040	852	674	-	-
2.....	-	-	-		0.0	1,030	777	1,040	852	685	-	-
3.....	-	-	-		0.0	927	779	1,040	855	677	-	-
4.....	-	-	-		0.0	833	779	1,040	1,030	682	-	-
5.....	-	-	-		0.0	934	777	1,040	1,360	680	-	-
6.....	-	-	-	0.3x	0.0	1,020	779	1,040	984	680	-	-
7.....	-	-	-		14.8	1,030	777	1,030	970	680	-	-
8.....	-	-	-		19.8	1,030	885	1,020	964	685	-	-
9.....	-	-	-		88	1,030	973	1,020	1,150	690	-	-
10.....	-	-	-		156	1,040	973	1,020	1,480	693	-	-
11.....	-	-	-	0.3x	156	971	964	1,020	1,850	687	-	-
12.....	-	-	-	0.2e	161	763	953	1,020	2,010	690	-	-
13.....	-	-	-	0.1e	160	720	950	1,010	2,010	690	-	-
14.....	-	-	-	0.0	161	714	958	1,020	2,000	687	-	-
15.....	-	-	-	0.0	161	712	956	1,020	2,000	682	-	-
16.....	-	-	-	0.0	161	712	941	1,020	1,970	677	-	-
17.....	-	-	-	0.0e	162	714	932	1,020	1,960	677	-	-
18.....	-	-	-	0.0	162	712	935	1,030	1,970	677	-	-
19.....	-	-	-	0.0	162	714	935	1,020	2,010	674	-	-
20.....	-	-	-	0.0	250	714	935	1,020	1,990	680	-	-
21.....	-	-	-	0.0	466	717	935	1,040	1,980	687	-	-
22.....	-	-	-	0.0	594	720	959	1,050	1,970	687	-	-
23.....	-	-	-	0.0	597	720	1,030	1,060	1,960	687	-	-
24.....	-	-	-	0.0	600	717	1,070	1,060	1,950	687	-	-
25.....	-	-	-	0.0	600	717	1,150	1,050	1,940	685	-	-
26.....	-	-	-	0.0	741	717	1,150	1,050	1,940	685	-	-
27.....	-	-	-	0.0	883	720	1,150	1,060	1,940	399	-	-
28.....	-	-	-	0.0	906	791	1,170	1,060	1,920	1.6	-	-
29.....	-	-	-	0.0	1,020	821	1,170	1,020	1,620	0.4	-	-
30.....	-	-	-	0.0	1,030	779	1,110	855	783	0.2e	-	-
31.....	-	-	-	-	1,030	-	1,050	855	-	0.0e	-	-
Mean	-	-	-	0.12e	337	826	957	1,022	1,609	586	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	-	7.1	20,710	49,130	58,870	62,860	95,740	36,030	-	-

The Period..... Discharge: Daily - Maximum 12, 13 and 19 September, 2,010
 (214 days) Instantaneous Maximum 3 p.m., 19 September, 2,030
 Runoff: Acre-feet 323,300

e - Estimated.

x - Staff gauge reading.

Source: St. Mary Reservoir. Location: Lat. 49° 26', long. 112° 42', in NE. 1/4 sec. 36, tp. 5, rge. 21, W. 4th Mer., Alberta, one hundred and fifty feet above drop structure, and one and one-half miles west and two miles south of Raymond. Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: Irrigation seasons 1956 to date. Extremes Recorded: Daily - Maximum, 7 June 1957, 2,410 cfs; Instantaneous Maximum - 8 p.m., 7 June 1957, 2,450 cfs. Remarks: Records excellent.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	}	Nil	962	748	1,020	854	395	-	-
2.....	-	-	-		"	971	756	1,020	870	525	-	-
3.....	-	-	-		"	975	756	1,020	850	582	-	-
4.....	-	-	-		"	983	764	1,010	821	684	-	-
5.....	-	-	-		"	962	862	1,010	805	688	-	-
6.....	-	-	-	}	0e	950	870	1,010	809	688	-	-
7.....	-	-	-		"	962	862	1,010	821	668	-	-
8.....	-	-	-		"	971	899	1,010	821	544	-	-
9.....	-	-	-		"	979	924	1,010	813	529	-	-
10.....	-	-	-		"	988	950	1,010	809	525	-	-
11.....	-	-	-	}	69	975	941	1,010	813	525	-	-
12.....	-	-	-		0e	173	838	912	1,000	834	525	-
13.....	-	-	-		0e	189	821	920	1,000	829	525	-
14.....	-	-	-		0e	177	817	924	1,000	854	525	-
15.....	-	-	-		50e	173	817	924	996	862	525	-
16.....	-	-	-		100e	165	809	924	996	805	529	-
17.....	-	-	-		110x	165	801	929	996	813	529	-
18.....	-	-	-		50e	165	797	929	996	838	525	-
19.....	-	-	-		20e	165	788	924	992	809	529	-
20.....	-	-	-		10e	168	780	920	1,000	829	529	-
21.....	-	-	-		7.8	264	772	920	996	801	532	-
22.....	-	-	-		6.6	303	768	924	1,000	801	525	-
23.....	-	-	-		5.4	337	764	988	1,000	650	525	-
24.....	-	-	-		4.2	544	760	1,000	1,010	371	529	-
25.....	-	-	-		2.7	625	756	1,030	1,010	335	532	-
26.....	-	-	-		1.8	821	744	1,040	1,000	348	529	-
27.....	-	-	-		1.2	879	748	1,050	1,000	348	456	-
28.....	-	-	-		0.9	870	740	1,040	1,020	357	100	-
29.....	-	-	-		0.6	870	752	979	1,000	365	20.2	-
30.....	-	-	-		0.0	912	748	989	874	371	8.4	-
31.....	-	-	-		-	941	-	1,000	862	-	7.2	-
Mean	-	-	-		12.4e	290	850	923	996	710	479	-
Per sq. mi.	-	-	-		-	-	-	-	-	-	-	-
Acre-feet	-	-	-		736	17,800	50,570	56,720	61,270	42,260	29,470	-

The Period.... Discharge: Daily - Maximum 27 July, 1,050
 (214 days) Instantaneous Maximum 11 a.m., 28 July, 1,060
 Runoff: Acre-feet 258,800

e - Estimated.

x - Staff gauge reading.

Source: St. Mary River via Canadian St. Mary Canal. Location: Lat. 49° 21', long. 113° 03', in SW. 1/4 sec. 4, tp. 5, rge. 23, W. 4th Mer., Alberta, about one-quarter mile below headgate and about one mile northeast of Spring Coulee. Gauge: Recording. Measurement of Discharge: From footbridge or by wading. Period of Record: Irrigation seasons 1927 to date. Extremes Recorded: Daily - Maximum, 25 July 1957, 81 cfs; Instantaneous Maximum - 11:30 a.m., 24 September 1958, 87 cfs. Remarks: Records fair. Station relocated on new upper portion of canal in 1951, when diversion to the district via the new Canadian St. Mary Canal began. Prior to 1951, the recorded diversions were from the old Canadian St. Mary Canal (formerly called A. R. & I. Canal) and were included in the total diversion from the St. Mary River recorded at Kimball. Since 1951, the recorded diversions at this station are not included with the diversions in the Canadian St. Mary Canal at Spring Coulee.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	-	0.0	47.5	16.0	37.1	23.8	39.1	-	-
2.....	-	-	-	-	0.0	46.0	17.5	42.0	24.2	38.0	-	-
3.....	-	-	-	-	0.0	43.0	17.2	42.5	24.9	43.5	-	-
4.....	-	-	-	-	0.0	43.0	18.7	42.0	27.6	45.0	-	-
5.....	-	-	-	-	0.0	47.0	19.3	44.5	33.0	45.5	-	-
6.....	-	-	-	-	0.0	42.5	19.6	47.0	29.2	47.0	-	-
7.....	-	-	-	-	0.0	40.0	20.3	51	30.8	43.2	-	-
8.....	-	-	-	-	0.0	43.0	24.5	54	31.2	41.0	-	-
9.....	-	-	-	-	0.0	39.5	24.5	54	40.0	40.5	-	-
10.....	-	-	-	-	0.0	30.8	24.5	52	42.0	38.0	-	-
11.....	-	-	-	-	0.0	18.8	30.8	52	45.5	38.5	-	-
12.....	-	-	-	-	0.0	11.1	38.5	51	43.9	39.0	-	-
13.....	-	-	-	-	0.0	12.8	41.0	51	25.4	39.5	-	-
14.....	-	-	-	-	0.0	18.4	36.2	51	24.4	40.0	-	-
15.....	-	-	-	-	0.0	18.7	38.0	49.1	33.0	47.5	-	-
16.....	-	-	-	-	0.0	19.6	47.0	46.5	41.5	53	-	-
17.....	-	-	-	-	0.0	20.7	57	45.5	50	54	-	-
18.....	-	-	-	-	0.0	20.3	56	41.5	41.0	54	-	-
19.....	-	-	-	-	0.0	20.3	52	43.0	32.1	55	-	-
20.....	-	-	-	-	0.0	20.3	49.1	42.5	34.8	44.0	-	-
21.....	-	-	-	-	0.0	17.5	49.1	44.5	36.6	36.6	-	-
22.....	-	-	-	-	0.1	16.9	57	44.5	39.5	37.1	-	-
23.....	-	-	-	-	0.1	19.0	56	35.2	42.0	37.1	-	-
24.....	-	-	-	-	0.1	20.7	53	35.1	47.2	37.5	-	-
25.....	-	-	-	-	0.1	19.3	51	40.0	36.6	38.5	-	-
26.....	-	-	-	-	5.4	18.7	43.5	39.0	35.7	38.5	-	-
27.....	-	-	-	-	12.3	18.4	43.0	36.6	33.5	13.0	-	-
28.....	-	-	-	-	30.4	17.5	36.2	32.1	39.0	0.1	-	-
29.....	-	-	-	-	46.5	18.1	30.0	28.8	41.0	0.1	-	-
30.....	-	-	-	-	42.5	15.7	28.0	23.5	24.3	0.1	-	-
31.....	-	-	-	-	47.0	-	30.4	24.5	-	0.1	-	-
Mean	-	-	-	-	5.95	26.2	36.3	42.7	35.1	36.3	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	-	-	366	1,560	2,230	2,620	2,090	2,230	-	-

The Period..... Discharge: Daily - Maximum 17 July, 57
 (184 days) Instantaneous Maximum 11:30 a.m., 24 September, 87
 Runoff: Acre-feet 11,100

LAKE SHERBURNE - STATION No. 5AE_{0,9}

(International Gauging Station)

Location: Lat. 48° 49' 50", long. 113° 31' 10", in SE. 1/4 sec. 35, tp. 36 N., rge. 15 W., Montana, on Swiftcurrent Creek near Sherburne and about four and one-half miles southwest of Babb. Drainage Area: 64 square miles. Gauge: Recording. Period of Record: May and June 1915; May 1917 to September 1918; June 1921 to date. Prior to October 1943, data published by United States Geological Survey only. Prior to 1952, records were published under the title "Sherburne Lake Reservoir at Sherburne". The recorder was established on 7 May 1931 to replace former staff gauge at same location. Extremes Recorded: Maximum, 10 p.m., 19 June 1958, 62,640 acre-feet (elevation 4,785.96 feet). Revisions: Data to 1950 inclusive were reviewed in co-operation with the United States Geological Survey and revised data are available upon application to the District Engineer at Calgary, for address see page 8. Remarks: This is one of a number of stations which are maintained jointly by United States and Canada. Water is impounded on Swiftcurrent Creek for use in irrigation projects along lower Milk River by the United States Bureau of Reclamation. Water released from the lake is diverted to the Milk River basin through the United States St. Mary Canal. Records prior to October 1943 collected and published by the United States Geological Survey only.

Elevations in Feet and Contents in Acre-feet for Water Year 1957-58

Month	Elevation at End of Month	Contents at End of Month	Change in Contents During Month
October.....	4,742.08	9,950	+ 5,470
November.....	4,747.56	14,500	+ 4,550
December.....	4,750.04	16,840	+ 2,340
January.....	4,751.73	18,430	+ 1,590
February.....	4,754.48	21,080	+ 2,650
March.....	4,756.99	23,690	+ 2,610
April.....	4,759.74	26,610	+ 2,920
May.....	4,783.16	57,970	+31,360
June.....	4,785.60	62,060	+ 4,090
July.....	4,776.08	47,020	-15,040
August.....	4,749.56	16,360	-30,660
September.....	4,739.81	8,200	- 8,160
The Year.....	-	-	+ 3,720

ST. MARY RESERVOIR NEAR SPRING COULEE - STATION No. 5AE₂₅

Location: Lat. 49° 22', long. 113° 07', in SW. 1/4 sec. 12, tp. 5, rge. 24, W. 4th Mer., Alberta, on St. Mary River, four miles northwest of Spring Coulee, and about forty miles by river below International Boundary. Gauge: Recording. Period of Record: Water elevations and storage factors, April 1951 to date. Extremes Recorded: Daily - Maximum, 24 June 1958, elevation 3,619.99 feet, contents of reservoir 320,700 acre-feet; Minimum, 3 December 1951, elevation 3,492.5 feet, contents of reservoir 4,060 acre-feet. Remarks: Reservoir is operated by P.F.R.A. Total capacity is 320,000 acre-feet and live storage is 285,000 acre-feet. Water is impounded on the St. Mary River for diversion to the St. Mary and Milk Rivers Development irrigation system via the Canadian St. Mary Canal and the Magrath Irrigation District Canal. Data supplied by P.F.R.A.

Elevations in Feet and Contents in Acre-feet for Water Year 1957-58

Month	Elevation at End of Month	Contents at End of Month	Change in Contents During Month
October.....	3,592.99	145,900	-19,000
November.....	3,593.68	148,700	+ 2,800
December.....	3,595.75	157,800	+ 9,100
January.....	3,597.16	164,500	+ 6,700
February.....	3,598.88	173,200	+ 8,700
March.....	3,601.70	188,500	+15,300
April.....	3,603.77	200,500	+12,000
May.....	3,616.63	289,700	+89,200
June.....	3,619.62	317,200	+27,500
July.....	3,617.01	293,000	-24,200
August.....	3,611.19	247,700	-45,300
September.....	3,597.80	167,700	-80,000
The Year.....	-	-	+ 2,800

BOW RIVER AT BANFF - STATION No. 5BB₁

Location: Lat. 51° 10' 30", long. 115° 34' 10", in SE. 1/4 sec. 35, tp. 25, rge. 12, W. 5th Mer., Alberta, at bridge about one-half mile above confluence with Spray River. Drainage Area: 858 square miles. Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: May to November 1909 and April 1910 to date. Records prior to 19 November 1954 were obtained from manual gauge at present site. Average Discharge: (48 years) - 1,410 cfs. Extremes Recorded: Daily - Maximum, 14 June 1923, 13,300 cfs (estimated), Minimum, 5 January 1932, 128 cfs; Instantaneous Maximum - at noon, 14 June 1923, 14,100 cfs (estimated). Revisions: 1915, W.R.P. 117; December 1912 mean discharge has been corrected to 430 cfs; November 1915 mean discharge has been corrected to 573 cfs; runoff for November 1915 and for the year 1915 have been corrected to 34,096 and 1,070,276 acre-feet; 1923 records are published in W.R.P. 46. Runoff in inches for water year 1941-42 has been corrected to 21.26 inches. Remarks: Records excellent during open-water periods and fair during ice period.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	874	612	445	348	339	217	251	357	5,390	4,340	2,660	1,450
2.....	930	564	434	354	315	242	253	381	5,550	4,210	2,570	1,460
3.....	1,170	555	438	371	345	238	256	413	5,080	3,830	2,510	1,310
4.....	1,080	555	449	388	339	240	267	439	4,600	3,620	2,530	1,190
5.....	986	547	434	384	333	253	267	474	4,490	3,480	2,150	1,130
6.....	930	581	377	371	330	249	272	534	4,600	4,210	2,000	1,090
7.....	879	555	398	361	318	249	272	637	4,780	3,980	2,170	1,090
8.....	847	480x	434	354	315	244	272	872	4,700	3,830	2,280	1,120
9.....	799	408x	434	358	313	249	267	1,090	4,780	3,640	2,300	1,160
10.....	794	472x	394	351	327	240	270	1,230	5,530	3,500	2,260	1,230
11.....	783	547	394	361	345	238	270	1,420	5,610	3,520	2,310	1,300
12.....	773	568	391	358	333	230	272	1,630	5,080	3,690	2,300	1,440
13.....	773	551	388	354	310	228	285	1,720	4,390	4,160	2,240	1,690
14.....	789	542b	384	351	330	221	313	1,750	4,160	3,620	2,170	1,750
15.....	783	521	384	348	333	228	307	1,980	4,030	3,190	2,150	1,470
16.....	753	464x	321	361	345	232	301	2,550	3,710	3,120	2,120	1,310
17.....	737	408	384	358	339	230	285	2,820	3,550	3,210	2,140	1,290
18.....	712	408	398	358	342	240	285	2,760	3,550	3,190	2,190	1,260
19.....	683	434	381	310	342	251	285x	2,990	3,550	3,230	2,190	1,240
20.....	664	374	394	321	330	253	290	3,590	3,480	3,230	2,150	1,220
21.....	668	333	384	336	304	244	285	5,000	3,280	3,210	2,070	1,130
22.....	592e	438	381	318	288	238	283	5,220	3,190	3,280	2,040	1,090
23.....	517x	438	377	342	277	246	275	5,980	3,370	3,370	2,000	1,040
24.....	538x	517	384	345	267	256	272	6,370	3,480	3,010	1,950	985
25.....	640x	509	384	348	260	260	277	6,670	3,480	2,840	2,000	956
26.....	659	496	384	348	258	260	275	6,730	3,690	2,700	2,060	927
27.....	626	423	377	339	256	256	270	6,400	3,710	2,630	2,070	886
28.....	604	430	364	339	236	256	267	6,190	4,950	2,630	1,850	872
29.....	586	374	374	351	-	253	275	6,280	4,700	2,660	1,670	879
30.....	617	388	361	342	-	256	324b	6,220	4,180	2,590	1,540	851
31.....	650	-	354	351	-	256	-	5,640	-	2,630	1,390	-
Mean	756	483	393	351	313	244	278	3,108	4,288	3,366	2,130	1,194
Per sq. mi.	0.88	0.56	0.46	0.41	0.36	0.28	0.32	3.62	5.00	3.92	2.48	1.39
Acre-feet	46,480	28,740	24,160	21,580	17,390	14,980	16,550	191,100	255,200	207,000	131,000	71,040

The Year.....Discharge: Daily - Maximum 26 May, 6,730

- Minimum 1 March, 217

Instantaneous Maximum 9 a.m., 26 May, 6,980

Mean 1,416; Per Square Mile 1.65

Runoff: Acre-feet 1,025,000; Depth in inches on drainage area 22.40

b - Ice conditions 14 November to 30 April.

x - Wire-weight gauge readings 16 November to 19 April and as indicated.

Location: Lat. 51° 07' 10", long. 115° 02' 00", in NE. 1/4 sec. 10, tp. 25, rge. 8, W. 5th Mer., Alberta, about three hundred feet below the Horseshoe Falls Plant of Calgary Power Limited. Drainage Area: 1,960 square miles (revised). Gauge: Recording. Measurement of Discharge: From cableway. Period of Record: January 1923 to date. Average Discharge: (35 years) - 2,818 cfs. Extremes Recorded: Daily - Maximum, 3 June 1932, 26,900 cfs, Minimum, (Regulated) 29 December 1941, 242 cfs; Instantaneous Maximum - 5 p.m., 2 June 1932, 31,900 cfs. Revisions: 1941, 1950, W.R.P. 117. Remarks: Records excellent. Daily discharges for some periods are from reports of flow past Horseshoe Falls plant by Calgary Power Ltd. Discharge affected by regulation of power plants upstream. Records were collected at station near Morley, about eight miles downstream, from November 1911 to March 1912 and at station two miles upstream from present site, and above mouth of Kananaskis River for period March 1912 to December 1922.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	2,070	1,670x	1,275x	1,545	2,250	1,720	1,900	2,300	6,480	5,290	3,840	2,120
2.....	2,160	1,570	1,300	1,650	2,145	1,615	2,265	2,050	6,500	5,510	3,880	2,680
3.....	2,390	1,430	1,555	1,675	2,130	1,770	2,135	1,700	6,600	5,070	3,960	2,610
4.....	2,290	1,560	1,625	2,290	2,660	2,175	2,435	1,300	6,380	5,050	4,090	2,490
5.....	2,380	1,700	1,730	1,590	2,625	2,110	2,055	1,910	5,860	4,880	4,360	2,290
6.....	2,660	1,830	1,570	1,745	2,495	2,270	1,955	2,140	5,600	5,130	3,710	2,020
7.....	2,750	1,790	1,745	1,975	2,550	2,000	2,055	2,210	6,530	5,680	3,300	1,800
8.....	2,850	1,700	1,465	2,130	2,600	1,920	2,080	2,200	6,000	5,140	3,630	2,170
9.....	2,960	1,380	1,615	2,105	2,105	1,815	2,115	2,860	6,430	5,100	4,150	1,650
10.....	3,020	1,240	1,810	1,855	2,485	1,980	2,005	3,000	6,900	4,750	3,690	2,250
11.....	2,940	1,160	2,260	1,845	2,830	2,125	2,050	2,270	7,580	4,700	3,120	2,350
12.....	2,970	1,310	2,015	1,780	2,705	1,935	1,600	3,300	7,470	4,870	3,490	2,230
13.....	1,950	1,840	2,055	2,140	2,520	1,905	1,435	3,870	6,590	5,280	3,330	2,660
14.....	2,320	1,790	2,005	1,845	2,360	2,215	1,255	3,900	6,230	5,400	3,480	2,840
15.....	2,540	1,700	1,325	2,195	2,635	2,310	1,170	3,500	5,600	4,820	3,390	2,700
16.....	2,070	1,780	1,595	2,465	2,235	2,050	1,415	3,090	5,660	4,380	3,140	2,620
17.....	1,840	940	2,000	2,200	2,495	2,320	1,290	4,370	5,480	4,380	3,140	2,290
18.....	1,730	1,960	2,325	2,105	2,600	2,710	1,320	4,170	4,950	4,290	3,250	2,260
19.....	1,890	1,680	2,010	1,485	2,440	2,525	1,415	4,390	4,780	4,230	3,400	2,460
20.....	1,400	1,370	2,065	1,420	2,615	2,570	1,050	4,660	4,630	4,230	3,360	1,980
21.....	1,370	1,510	2,150	2,190	2,335	2,495	1,415	4,675x	4,430	4,370	3,280	1,910
22.....	1,625x	1,840	1,295	2,475	2,060	2,260	1,465	5,000	4,180	4,720	3,180	2,060
23.....	1,610	1,590	1,595	2,060	1,410	2,155	1,304	5,395	4,190	4,940	3,780	2,160
24.....	1,355	1,210	1,290	2,185	1,970	1,910	1,690	6,115	4,300	4,590	3,050	2,000
25.....	1,540	1,250	1,745	2,155	2,490	2,165	1,665	6,485	4,410	4,310	2,990	1,980
26.....	1,385	1,720	1,420	1,435	2,440	1,925	1,345	6,740	4,230	4,050	3,130	1,670x
27.....	1,170	1,630	1,545	1,900	2,155	2,020	1,205	6,775x	4,490	3,820	3,210	1,870
28.....	1,320	2,030	2,170	2,220	2,115	2,145	1,515	7,180	5,160	3,630	3,040	1,465
29.....	1,515	1,580	2,100	2,310	-	1,825	1,720	6,960	5,650	3,980	2,820	1,595
30.....	1,500	1,540	1,850	2,130	-	1,770	1,645x	6,930	5,510	3,820	2,810	1,935x
31.....	1,530	-	2,160	2,245	-	2,000	-	6,910	-	3,780	2,330	-
Mean	2,035	1,577	1,763	1,979	2,373	2,087	1,666	4,140	5,627	4,651	3,398	2,170
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	125,200	93,820	108,400	121,700	131,800	128,400	99,110	254,600	334,800	286,000	208,900	129,200

The Year.....Discharge: Daily - Maximum 11 June, 7,580
 - Minimum 17 November, 940
 Instantaneous Maximum 8 a.m., 11 June, 12,030
 Mean 2,793; Per Square Mile 1.42
 Runoff: Acre-feet 2,022,000; Depth in inches on drainage area 19.34

x - Calgary Power Ltd. data for flow through Horseshoe Falls Plant 22 October to 1 November, 1 December to 30 April, 21 to 27 May and 26 to 30 September.

Location: Lat. 51° 12' 50", long. 114° 36' 40", in SE. 1/4 sec. 15, tp. 26, rge. 5, W. 5th Mer., Alberta, about four miles below Ghost Dam and five miles above mouth of Jumpingpound Creek. Drainage Area: 2,500 square miles. Gauge: Recording. Measurement of Discharge: From cableway. Period of Record: Part-year records, 1933 to 1936; continuous April 1937 to date. Average Discharge: (21 years) - 3,019 cfs. Extremes Recorded: Daily - Maximum, (Regulated) 18 June 1933, 20,300 cfs, Minimum, (Regulated) 11 February 1940, 143 cfs; Instantaneous Maximum - 10:30 p.m., 17 June 1933, 21,400 cfs. Remarks: Records excellent during summer months and fair during winter months. Daily discharges for some periods are from reports of flow past Ghost Dam by Calgary Power Ltd. Discharge is affected by regulation of power plants upstream.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	1,920x	2,190	1,490	1,580	2,660	2,000	2,390	3,180	6,070	6,230	4,160x	2,670
2.....	2,240	1,925	1,370	1,900	2,600	1,800	2,300	2,580	6,540	6,430	4,430	3,120
3.....	2,120	2,620	1,860	1,930	2,510	1,810	2,510	2,010	6,510	6,320	4,220	2,945
4.....	2,550	1,990	1,990	1,800	2,520	2,400	2,500	1,390	6,940	6,280	4,570	3,070
5.....	2,635	1,465	2,010	2,140	3,030	2,400	2,680	2,140	6,680	5,070	4,240	3,340
6.....	2,570	1,710	1,830	2,000	2,880	2,400	2,510	2,930	6,580	6,000	4,310	2,490
7.....	2,750	1,620	1,700	2,000	2,900	2,400	2,390	3,290	6,460	7,020	3,470	2,060
8.....	3,065	1,790	2,030	2,400	2,780	2,015	2,350	2,920	6,840	7,180	3,510	2,880
9.....	3,030	1,840	1,920	2,380	2,600	2,000	2,370	2,860	6,560	5,660	4,640	2,850
10.....	2,330	1,200	1,790	2,400	3,020	2,190	2,460	3,130	6,740	5,780	3,080	2,270
11.....	3,600	1,520	1,860	2,000	2,930	2,495	2,430	2,290	7,160	5,020	4,320	2,090
12.....	3,150	1,680	1,800	1,940	2,850	2,310	2,180	3,100	7,760	5,520	3,480	2,620
13.....	3,350	2,005	1,755	2,030	2,920	2,210	2,450	3,220	7,700	5,860	3,465	1,820
14.....	2,160	1,850	1,530	2,400	3,050	1,970	3,005	3,610	7,570	6,230	3,680	2,120
15.....	2,940	1,960	2,600	2,455	2,740	2,540	3,190	3,420	7,060	6,520	3,615	3,020
16.....	2,210	1,810	1,820	2,345	2,800	2,410	3,630	3,840	5,740	5,580	3,245	3,110
17.....	2,110	1,630	1,790	2,750	3,040	3,580	3,800	4,340	5,400	4,530	3,430	2,530
18.....	1,410	1,800	2,600	2,450	2,900	3,230	3,870	3,680	5,360	5,070	3,485	2,530
19.....	1,620	1,860	2,300	2,080	3,005	3,130	3,780	4,310	5,080	4,990	3,265	2,770
20.....	1,615	1,770	2,130	1,820	2,925	3,060	3,740	4,290	4,970	4,740	3,700	2,425
21.....	1,995	1,670	1,950	1,820	2,920	3,150	3,410	4,480	4,830	4,780	3,560	2,060
22.....	1,735	1,600	1,900	2,410	2,730	2,460	3,620	4,580	4,640	4,660	3,550	2,740
23.....	1,940	1,880	1,700	2,810	2,480	1,990	2,650	4,340	4,130	5,760	4,190	2,720
24.....	1,500	930	1,500	2,500	1,805	2,160	2,320	4,530	3,800	6,030	2,600	2,620
25.....	2,130	2,010	1,800	2,490	1,975	2,160	2,370	4,500	4,230	5,430	3,580	2,350
26.....	1,850	1,850	1,600	1,800	2,600	2,330	1,410	4,390	4,440	4,830	3,490	2,050
27.....	1,570	1,830	2,080	1,800	2,800	2,110	1,350	4,910	4,240	4,190	3,180	1,910
28.....	1,640	2,110	2,400	2,400	2,480	2,195	1,900	6,650	5,180	4,450	3,130	1,900
29.....	1,420	1,630	1,990	2,600	-	2,250	3,300	6,110	5,760	4,290	3,250	2,000
30.....	1,850	1,740	2,420	2,600	-	1,940	3,520x	5,080	5,760	4,410	2,820	2,110x
31.....	1,990	-	2,390	2,410	-	2,000	-	6,710	-	4,200	2,920	-
Mean	2,226	1,783	1,933	2,208	2,730	2,358	2,746	3,833	5,891	5,454	3,632	2,506
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	136,800	106,100	118,800	135,700	151,600	145,000	163,400	235,700	350,500	335,300	223,300	149,100

The Year.....Discharge: Daily - Maximum 12 June, 7,760
 - Minimum 24 November, 930
 Instantaneous Maximum 5 p.m., 7 July, 8,030
 Mean 3,110 Per Square Mile 1.24
 Runoff: Acre-feet 2,251,000; Depth in inches on drainage area 16.89

x - Calgary Power Ltd. data for flow through Ghost Plant 1 October to 30 April and 1 August to 30 September.

Location: Lat. 51° 03' 00", long. 114° 03' 00", in NE, 1/4 sec. 15, tp. 24, rge. 1, W. 5th Mer., Alberta, at Langevin Bridge on 4th Street East, Calgary, about one-half mile above confluence with Elbow River. Drainage Area: 3,000 square miles (revised). Gauge: Recording. Measurement of Discharge: From bridge. Period of Record: November 1910 to September 1950, April to November 1952 and May 1953 to date. Prior to 1914, records were obtained from manual gauge near present site. Average Discharge: (45 years) - 3,247 cfs. Extremes Recorded: Daily - Maximum, (Regulated) 3 June 1932, 41,100 cfs, Minimum, (Regulated) 24 February 1930, 123 cfs; Instantaneous Maximum - 2 a.m., 3 June 1932, 53,600 cfs. Revisions: September 1936 mean discharge has been corrected to 2,080 cfs; 1919, 1936, 1938 and 1940, W.R.P. 117; 1954, W.R.P. 121. Remarks: Records good during summer months and fair during winter months. Daily discharges for some periods are from reports of flow past Bearspaw Dam by Calgary Power Ltd. The maximum discharge during the June 1897 flood was estimated at 99,000 cfs at an elevation of 3,423.13 feet. Discharge affected by regulations at upstream power plants.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	1,880	2,420	1,930	2,270	2,480	2,490	2,175	4,310	7,310	6,660	3,980	2,880
2.....	2,180	2,380	1,310	1,500	2,780	2,120	2,390	2,580	7,080	6,660	4,350	2,690
3.....	2,360	2,200	1,610	1,790	2,700	1,810	2,830	3,050	7,460	6,630	4,850	2,940
4.....	2,290	2,320	2,150	1,920	2,450	1,760	2,580	2,790	7,700	6,700	4,440	3,020
5.....	2,610	1,590	2,540	1,930	2,890	2,205	2,860	2,950	8,370	6,230	4,270	2,960
6.....	2,850	1,680	2,490	2,120	3,310	2,830	3,120	2,490	7,410	5,980	4,210	2,900
7.....	2,640	1,540	2,390	2,090	2,760	2,650	2,870	3,600	6,570	7,070	3,870	1,900
8.....	2,940	1,910	2,070	2,070	2,700	2,335	2,950	4,050	7,740	8,450	3,300	2,460
9.....	3,120	2,100	1,980	2,250	2,550	2,040	3,360	3,320	7,500	6,630	3,980	2,980
10.....	2,960	1,430	2,050x	2,450	2,860	1,990	3,130	2,930	7,540	6,590	3,660	2,260
11.....	2,670	1,700	1,820	2,430	3,130	2,580	3,280x	2,980	7,500	5,340	3,950	2,090
12.....	2,890	1,900	1,830	2,010	3,110	2,580	2,480	3,820	8,450	4,910	3,420	2,430
13.....	4,390	1,870	1,790	1,960	2,700	2,410	4,870	3,530	8,840	6,410	3,350	2,430
14.....	2,690	2,190	1,890	2,060	2,710	2,145	4,660	4,400	8,160	6,480	3,350	2,010
15.....	2,710	1,720	1,525	2,230	3,040	1,990	4,440	4,650	8,110	7,390	3,690	3,060
16.....	2,500	2,260	1,645	2,405	2,990	2,240	3,960	4,120	6,610	6,520	3,320	2,680
17.....	2,500	1,770	2,220	2,705	2,930	3,290	4,100	5,310	5,660	5,010	3,320	3,170
18.....	1,260	1,430	2,070	2,810	3,030	3,785	4,140	4,400	5,340	4,750	3,300	2,460
19.....	1,640	2,220	1,870	2,565	2,820	3,080	3,860	4,370	5,580	5,340	3,280	2,410
20.....	1,660	1,740	2,530	2,120	2,985	3,000	3,780	4,780	5,450	4,910	3,280	2,420
21.....	1,840	1,830	2,460	1,810	3,230	3,630	4,040	5,310	5,040	4,910	3,540	2,160
22.....	1,960	2,190	2,250	1,840	3,150	3,050	4,140	5,310	4,780	4,780	3,470	2,440
23.....	2,070	1,820	1,950	2,500	2,935	2,540	3,480	5,210	4,690	5,270	3,870	3,160
24.....	1,760	1,260	1,680	2,940	2,445	2,120	2,600	5,270	4,120	6,480	3,190	2,110
25.....	1,960	1,680	1,640	2,500	1,790	2,210	1,990	5,210	3,930	5,760	3,100	2,160
26.....	1,920	1,590	1,530	2,390	1,990	2,215	1,680	5,270	4,270	4,880	3,230	2,060
27.....	1,890	1,570	1,690	1,910	2,580	2,150	1,130	5,140	4,630	4,560	3,120	1,960
28.....	1,490	1,690	1,955	1,810	3,000	2,300	2,340	7,020	4,500	4,240	3,120	1,940
29.....	1,610	1,970	1,990	2,120	-	2,370	2,370	7,780	6,340	4,320	3,140	1,980
30.....	1,640	1,970	2,665	2,730	-	2,150	3,530	5,860	6,630	4,300	2,960	1,960
31.....	2,490	-	2,305	2,760	-	2,190	-	6,940	-	4,350	2,880	-
Mean	2,302	1,865	1,994	2,226	2,787	2,460	3,171	4,476	6,444	5,758	3,574	2,469
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	141,600	111,000	122,600	136,800	154,800	151,200	188,700	275,200	383,400	354,100	219,700	146,900

The Year.....Discharge: Daily - Maximum 13 June, 8,840
 - Minimum 27 April, 1,130
 Instantaneous Maximum 6 p.m., 29 May, 9,940
 Mean 3,296; Per Square Mile 1.10
 Runoff: Acre-feet 2,386,000; Depth in inches on drainage area 14.91

x - Calgary Power Ltd. data for flow through Bearspaw Plant 10 December to 11 April.

Location: Lat. 50° 49' 50", long. 113° 25' 00", in NW, 1/4 sec. 33, tp. 21, rge. 25, W. 4th Mer., Alberta, fifty feet below bridge on Highway No. 24 and about two miles below Carseland Weir and diversion to Bow River Development. Drainage Area: 6,000 square miles. Gauge: Recording. Measurement of Discharge: From bridge. Period of Record: Part-year records 1910, 1913 to 1915, and 1956 to date. Records in 1910 were obtained from manual gauge in sec. 31 and from 1913 to 1915 from manual gauge in NE, 1/4 sec. 32. Records in 1956 were obtained by recorder in SE, 1/4 sec. 31. Records prior to 1956 were published under the title "near Namaka". Extremes Recorded: Daily - Maximum, 13 June 1913, 22,845 cfs, Minimum, 20 October 1958, 1,290 cfs. Remarks: Records excellent. Discharge affected by regulation at power plants upstream and diversion to Bow River Development.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	-	5,090	9,550	8,560	5,920	2,690	1,790	-	-
2.....	-	-	-	-	6,390	9,160	8,600	5,390	2,740	2,250	-	-
3.....	-	-	-	-	3,620	9,510	8,600	5,720	2,370	2,280	-	-
4.....	-	-	-	-	4,190	9,910	8,860	5,390	2,920	2,440	-	-
5.....	-	-	-	-	3,620	10,900	8,300	5,220	2,490	3,600	-	-
6.....	-	-	-	-	4,640	10,240	7,800	4,900	3,070	2,640	-	-
7.....	-	-	-	-	4,790	9,130	11,140	4,710	2,000	2,760	-	-
8.....	-	-	-	-	6,280	10,150	12,580	3,940	1,580	3,490	-	-
9.....	-	-	-	-	6,780	9,710	10,950	3,680	2,370	3,270	-	-
10.....	-	-	-	-	6,140	9,320	9,790	4,840	2,530	2,680	-	-
11.....	-	-	-	-	6,060	9,550	9,050	3,620	1,670	2,930	-	-
12.....	-	-	-	-	6,240	9,870	7,580	4,180	1,570	3,460	-	-
13.....	-	-	-	-	8,050	10,240	10,260	3,620	2,860	3,160	-	-
14.....	-	-	-	-	4,750	9,870	10,960	3,530	2,010	3,120	-	-
15.....	-	-	-	-	7,660	9,870	11,150	3,510	2,130	3,020	-	-
16.....	-	-	-	-	7,370	9,400	10,150	3,760	2,900	2,750	-	-
17.....	-	-	-	-	7,420	7,690	8,600	3,290	2,920	2,900	-	-
18.....	-	-	-	-	7,520	7,440	8,050	3,190	2,540	4,670	-	-
19.....	-	-	-	-	6,520	7,800	7,650	3,190	2,140	3,680	-	-
20.....	-	-	-	-	6,860	7,870	7,440	3,140	2,340	1,290	-	-
21.....	-	-	-	-	7,620	8,120	6,700	3,190	1,890	3,180	-	-
22.....	-	-	-	5,490	8,230	7,440	6,630	3,490	1,710	3,390	-	-
23.....	-	-	-	5,040	8,600	7,300	6,670	3,420	2,250	2,930	-	-
24.....	-	-	-	3,280	8,160	6,220	8,070	4,060	2,420	3,510	-	-
25.....	-	-	-	3,140	7,870	5,620	8,000	2,580	1,920	3,520	-	-
26.....	-	-	-	2,980	7,760	5,620	6,880	3,130	1,810	3,540	-	-
27.....	-	-	-	1,690	7,510	6,220	6,460	3,080	1,630	1,520	-	-
28.....	-	-	-	1,680	7,690	6,430	7,440	3,010	1,630	2,700	-	-
29.....	-	-	-	2,920	9,050	7,930	5,990	3,090	1,770	3,260	-	-
30.....	-	-	-	4,120	8,660	8,820	6,500	3,240	1,790	2,840	-	-
31.....	-	-	-	-	7,720	-	5,920	2,710	-	3,280	-	-
Mean	-	-	-	-	6,737	8,563	8,430	3,863	2,222	2,963	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	-	-	414,300	509,600	518,300	237,500	132,200	182,200	-	-

The Period.....Discharge: Daily - Maximum 8 July, 12,580
 (184 days) - Minimum 20 October, 1,290
 Instantaneous Maximum 11 a.m., 8 July, 13,520
 Mean 5,464
 Runoff: Acre-feet 1,994,000

Location: Lat. 51° 09' 30", long. 115° 33' 00", in SW. 1/4 sec. 25, tp. 25, rge. 12, W. 5th Mer., Alberta, about one-half mile above confluence with Bow River. Drainage Area: 276 square miles (revised). Gauge: Recording. Measurement of Discharge: From bridge or by wading. Period of Record: July 1910 to date. Prior to 1 April 1948, records were obtained from manual gauge about one-quarter mile downstream in NW. 1/4 sec. 25; later records from recording gauges near present site. Average Discharge: (48 years) - 440 cfs. Extremes Recorded: Daily - Maximum, 3 June 1932, 5,060 cfs, Minimum, 24 to 28 February 1958, (Regulated) 10 cfs (discharge measurement under ice conditions). Revisions: 1914, 1917, W.R.P. 31; 1921, 1934, W.R.P. 117; records for 1923 published in W.R.P. 46; February 1935 mean discharge has been corrected to 118 cfs. Remarks: Records excellent except during ice or estimated periods when they are fair. Discharge affected by storage in Spray Reservoir since 1949.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	63	61	40	26	19	11	28	42e	191	215	210	223
2.....	86	59	40	26	19	12	29		205	215	216	213
3.....	92	57	40	26	19	13	30		201	219	213	195
4.....	89	56	40	26	19	14	30		191	191	223	184
5.....	86	55	40	26	19	15	31		181	212	220	192
6.....	86	54	40	26	19	17	32	112e	194	250	220	192
7.....	81	53	41	26	19	19	33		236	212	220	192
8.....	81	52	42	26	19	21	34		231	231	216	189
9.....	83	52	50	26	19	24	35		227	215	207	189
10.....	86	51	49	26	19	27	36		240	212	207	186
11.....	81	50	47	26	18	29	36	147e	201	208	210	184
12.....	81	50	46	26	18	32	37		215	219	220	189
13.....	75	49	45	26	18	33	37b		212	260	220	210
14.....	58	49	43	27	17	33	37.5		223	223	220	198
15.....	53	49	42	27	16	33			215	178	220	192
16.....	52b	49	40	26	16	33	36e	150e	215	171	220	192
17.....	51	49	39	25	15	32		152	219	212x	223	160
18.....	50	49	38	25	14	32		148	227	200e	220	118
19.....	50	50	36	24	13	31		158	240	189	230	111
20.....	50	50	35	24	13	30		181	236	186	230	109
21.....	50	51	34	23	12	30	31e	212	219	186	230	113
22.....	50	51	33	22	11	30		227	215	195	223	109
23.....	50	52	32	22	11	29		236	212	201	220	94
24.....	50	53	31	21	10	29		245	215	198	230	67
25.....	50	54	30	21	10	29		260	215	198	216	67
26.....	50	55	29	20	10	28	29.5	250	212	216	216	96
27.....	50	46	28	20	10	28		223	223	210	216	61
28.....	52	42	28	19	10	28		208	281	210	213	58
29.....	58	41	27	19	-	28		208	205	213	223	56
30.....	65	40	26	19	-	28		236	219	210	216	58
31.....	63	-	26	19	-	28	-	191	-	210	216	-
Mean	65.2	51.0	37.3	23.9	15.4	26.0	32.9e	155e	217	209	219	147
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	4,010	3,030	2,290	1,470	857	1,600	1,960	9,500	12,920	12,820	13,460	8,720

The Year.....Discharge: Daily - Maximum 28 June, 281
- Minimum 24 to 28 February, 10
Instantaneous Maximum 2 a.m., 22 May, 627
Mean 100
Runoff: Acre-feet 72,640

b - Ice conditions 16 October to 13 April, e - Estimated, x - Staff gauge reading.

Location: Lat. 50° 47' 30", long. 115° 18', in sec. 22, tp. 21, rge. 10, W. 5th Mer., Alberta, about two hundred feet below head of canal at north end of Mud Lake and twenty miles south of Canmore. Drainage Area: 8.8 square miles. Gauge: Recording. Measurement of Discharge: From footbridge or by wading. Period of Record: Periods of varying length 1949 to date. Extremes Recorded: Daily - Maximum, 24 June 1955, 196 cfs, Minimum, 5 April 1950, 0.9 cfs (discharge measurement). Revisions: Drainage area, W.R.P. 117: September 1956 mean discharge published in error in W.R.P. 121 and should be 20.5 cfs. Remarks: Diversion of the flow of Burstall Creek and the Mud Lake drainage basin was made on 24 August 1949 by damming the natural outlet to the Kananaskis River basin at the south end of Mud Lake and diverting the flow through a canal to Smuts Creek and thence to the Spray Reservoir. Data supplied by Calgary Power Ltd. Records for August and September 1949 were not published and are available upon application to the District Engineer at Calgary, for address see page 8.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	-	Ze	72	54	54	27.0	10.3	7.5	-
2.....	-	-	-	-		76	54	51	26.7	10.1	7.4	-
3.....	-	-	-	-		68	50	52	22.2	9.5	7.4	-
4.....	-	-	-	-		57	48	46.0	19.0	9.5	7.2	-
5.....	-	-	-	-		54	47	34.8	17.2	9.7	-	-
6.....	-	-	-	-	1.9e	54	61	34.0	16.7	9.9	6e	-
7.....	-	-	-	-		56	63	44.7	18.0	10.7		-
8.....	-	-	-	-		2.4	53	60	47	20.5		-
9.....	-	-	-	-		3.3	55	59	51	25.5		-
10.....	-	-	-	-		4.7	66	54	47	31.2		-
11.....	-	-	-	-	6.0	67	61	48	31.2	8.9	-	-
12.....	-	-	-	-	8.3	54	79	47	33.3	9.7	-	-
13.....	-	-	-	-	11.5	44.7	86	43.9	40.7	10.5	-	-
14.....	-	-	-	-	12.5	42.5	73	39.4	37.2	11.3	5.8x	-
15.....	-	-	-	-	16.0	45.2	61	38.9	27.7	11.9	-	-
16.....	-	-	-	-	26.7	44.7	57	38.9	22.5	11.3	-	-
17.....	-	-	-	-	34.4	45.2	54	42.0	25.5	10.9	-	-
18.....	-	-	-	-	32.6	49.5	57	42.9	23.7	10.9	-	-
19.....	-	-	-	-	33.0	49.0	57	46.1	21.0	13.3	-	-
20.....	-	-	-	-	42.5	45.7	57	45.7	20.3	13.3	-	-
21.....	-	-	-	-	70	43.9	57	40.2	17.8	11.9	-	-
22.....	-	-	-	-	81	44.7	61	38.9	16.5	10.9	-	-
23.....	-	-	-	-	95	50	64	36.8	14.5	10.5	-	-
24.....	-	-	-	-	101	53	51	35.2	13.3	9.7	-	-
25.....	-	-	-	-	112	52	48	38.4	12.7	9.1	-	-
26.....	-	-	-	-	107	54	45.2	42.5	11.7	8.7	-	-
27.....	-	-	-	-	97	54	44.7	39.8	11.7	8.7	-	-
28.....	-	-	-	-	91	80	44.7	40.7	11.3	8.5	-	-
29.....	-	-	-	-	91	65	46.1	34.8	11.1	8.3	-	-
30.....	-	-	-	-	91	53	46.1	29.4	10.9	7.9	-	-
31.....	-	-	-	-	83	-	51	24.0	-	7.9	-	-
Mean	-	-	-	-	40.9	54.9	56.5	41.8	21.3	10.1	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	-	-	2,510	3,270	3,470	2,570	1,270	623	-	-

The Period.....Discharge: Daily - Maximum 25 May, 112
 - Minimum 7 May, 1.9 (estimated)
 (184 days)
 Instantaneous Maximum 10 a.m., 25 May, 116
 Mean 37.6
 Runoff: Acre-feet 13,700

e - Estimated. x - Staff gauge reading.

SPRAY RESERVOIR AT THREE SISTERS DAM - STATION No. 5BC₆

Location: Lat. 50° 59', long. 115° 22', in sec. 29, tp. 23, rge. 10, W. 5th Mer., Alberta, at Three Sisters Dam at north end of Reservoir and about seven miles south of Canmore. Gauge: Staff. Period of Record: May 1949 to date. Extremes Recorded: Maximum, 23 and 25 August 1954, 5,583.6 feet (Live storage 228,403 acre-feet), Minimum, 16 May 1956, (Since filled in summer of 1950) 5,528.6 feet (Live storage 17,165 acre-feet). Remarks: Construction of reservoir was completed and storage begun in May 1949. Data is supplied by Calgary Power Ltd. Record of gauge readings for period May to September 1949 have not been published but are available upon application to the District Engineer at Calgary, for address see page 8.

Elevations in Feet and Contents in Acre-feet for Water Year 1957-58

Month	Elevation at End of Month	Live Contents at End of Month	Change in Contents During Month
October	5,576.8	195,747	-15,612
November	5,573.4	180,050	-15,697
December	5,568.4	157,662	-22,388
January	5,562.3	131,736	-25,926
February	5,555.1	103,369	-28,367
March	5,544.9	66,851	-36,518
April	5,535.0	35,381	-31,470
May	5,544.8	66,514	+31,133
June	5,557.6	112,957	+46,443
July	5,567.9	155,472	+42,515
August	5,566.5	149,403	- 6,069
September	5,564.3	140,043	- 9,360
The Year	-	-	-71,316

Location: Lat. 51° 12' 10", long. 115° 30' 00", in SE. 1/4 sec. 8, tp. 26, rge. 11, W. 5th Mer., Alberta. Drainage Area: 333 square miles. Measurement of Discharge: Flow computed from turbine ratings. Period of Record: October 1942 to date. Average Discharge: (16 years) - 326 cfs. Extremes Recorded: Daily - Maximum, 28 August 1954, 1,590 cfs, Minimum, Nil at various times. Revisions: 1951, 1952, W.R.P. 117. Remarks: Data supplied by Calgary Power Ltd. Water is diverted from Minnewanka Lake through Cascade Power plant and discharged to Bow River below confluence with Cascade River. Published records include an estimated spill from Minnewanka Lake of 1,670 cfs-days from 6 to 17 August 1948 and 6,600 cfs-days from 25 August to 7 September 1954. No other spill has occurred during the period of record.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	90	325	10	160	470	485	185	830	15	40	5	5
2.....	90	10	440	425	535	310	295	570	15	60	45	20
3.....	165	10	390	660	970	725	100	10	15	85	45	5
4.....	175	500	280	125	790	685	10	10	15	65	595	15
5.....	570	455	65	20	835	550	25	485	15	5	5	20
6.....	10	470	85	780	910	320	10	605	15	25	5	20
7.....	570	615	85	670	930	390	10	600	20	15	5	20
8.....	590	330	240	615	760	255	35	700	15	32	40	15
9.....	660	10	740	590	570	490	140	770	425	30	320	90
10.....	600	10	655	720	945	640	55	525	235	40	5	75
11.....	435	10	570	665	795	455	65	175	260	40	5	5
12.....	420	685	470	195	840	570	95	310	90	15	5	5
13.....	10	450	610	800	790	440	75	280	20	5	5	15
14.....	460	515	270	655	800	550	210	335	40	25	5	15
15.....	465	460	250	700	615	540	165	140	15	20	30	25
16.....	10	10	665	800	385	130	115	155	260	25	5	15
17.....	60	10	600	660	910	900	95	525	35	15	5	13
18.....	300	415	625	280	605	680	100	220	15	20	10	5
19.....	10	480	510	405	855	745	10	50	15	20	5	5
20.....	10	505	490	870	695	665	10	15	15	20	5	5
21.....	390	595	10	700	520	785	95	15	40	450	5	15
22.....	350	520	45	815	200	345	240	15	50	310	5	15
23.....	190	10	375	605	170	60	490	15	40	130	135	15
24.....	285	10	470	690	765	350	490	35	25	200	5	5
25.....	65	490	10	570	783	170	420	15	50	510	25	70
26.....	10	560	10	240	650	175	40	15	40	20	5	335
27.....	10	545	550	745	495	153	10	15	30	55	5	5
28.....	230	590	760	740	175	190	380	15	40	45	5	5
29.....	435	530	180	610	-	135	555	60	50	20	35	215
30.....	400	290	775	665	-	78	690	15	30	5	5	295
31.....	410	-	780	750	-	180	-	15	-	5	5	-
Mean	273	347	388	578	670	424	174	243	64.8	75.9	44.7	45.6
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	16,810	20,660	23,850	35,550	37,220	26,070	10,340	14,960	3,860	4,670	2,750	2,710

The Year.....Discharge: Daily - Maximum 3 February, 970
 - Minimum at various times, 5
 Runoff: Acre-feet 199,500

Location: Lat. 51° 14' 10", long. 115° 29' 10", in SW. 1/4 sec. 21, tp. 26, rge. 11, W. 5th Mer., Alberta, at west end of lake, at control dam at entrance to intake canal to Cascade Power Plant and about five miles northeast of Banff. Gauge: Staff; elevations are referred to Geodetic Survey of Canada datum, from October 1939; levels prior to October 1939 were referred to Manitoba Hydrometric Survey datum which is 35.08 feet lower than G.S.C. datum. Period of Record: December 1916 to September 1917 and October 1920 to date. Records prior to 1940 were published under the title "Lake Minnewanka near Bankhead." Extremes Recorded: Maximum, (Regulated) 13 and 14 August 1948, elevation 4,840.95 feet (Total storage 377,000 acre-feet, live storage 205,000 acre-feet), Minimum, Calgary Power Ltd. license restricts drawdown to elevation 4,805 feet (contents 191,183 acre-feet) except by special permission. Reservoir can be drawn down to elevation 4,801 feet (contents 171,935 acre-feet). Remarks: Lake level subject to regulation to a minor degree since 1912. Live storage greatly increased in 1941 by construction of dam across west end of lake as part of Cascade River Power Development. Diversion into lake from Ghost River began the same year. Record of gauge readings may be obtained upon application to District Engineer at Calgary, for address see page 8. Record supplied by Calgary Power Ltd. Storage data from 1954 forward are based on revised datum for live storage. Published records of live storage for period 1950 to 1953 inclusive should be increased by 19,248 acre-feet.

Elevations in Feet and Contents in Acre-feet for Water Year 1957-58

Month	Elevation at End of Month	Live Contents at End of Month	Change in Contents During Month
October	4,831.70	154,610	- 5,073
November	4,829.10	140,837	-13,773
December	4,825.80	123,566	-17,271
January	4,819.80	92,724	-30,842
February	4,813.10	59,020	-33,704
March	4,808.75	37,524	-21,496
April	4,808.20	34,830	- 2,694
May	4,813.60	61,510	+26,680
June	4,823.05	109,349	+47,839
July	4,831.80	155,143	+45,794
August	4,834.90	171,787	+16,644
September	4,836.95	182,932	+11,145
The Year	-	-	+23,249

Location: Lat. 51° 02' 50", long. 115° 01' 40", in NE. 1/4, sec. 15, tp. 24, rge. 8, W. 5th Mer., Alberta, five and one-half miles above confluence with Bow River and about one mile below Barrier Power Plant. **Drainage Area:** 362 square miles (revised). **Gauge:** Recording. **Measurement of Discharge:** From cableway or by wading. **Period of Record:** Periods of varying length September 1911 to date. Station was located near confluence with Bow River prior to 13 May 1913 and in sec. 34 prior to 23 November 1947. Recorder was established on 4 June 1918 to replace former manual gauge. Prior to 1915, records were published under the title "near Kananaskis". **Average Discharge:** (40 years) - 539 cfs. **Extremes Recorded:** Daily - Maximum, 3 June 1932, 10,000 cfs, Minimum, Nil, 11 February 1922 (ice jam) and 30 April 1955 (regulated). **Instantaneous Maximum** - 4:30 p.m., 2 June 1932, 11,900 cfs. **Revisions:** 1913, 1917 W.R.P. 117; February 1916 mean discharge has been corrected to 118 cfs; runoff for February 1916 and for the year 1916 have been corrected to 6,787 and 646,265 acre-feet; May and September 1917 mean discharges have been corrected to 760 and 618 cfs; runoff for May and September 1917 and for the water year 1916-17 have been corrected to 46,731, 36,774 and 463,987 acre-feet; summary data for October, December 1949, March, May and July 1950 as shown in W.R.P. 109 apply to partial month records only. **Remarks:** Stream controlled for power purposes by Interlakes dam constructed in 1932 and raised in 1955, by Barrier dam constructed in 1947 and by Pocatererra dam constructed in 1955. Data for water year 1958 supplied by Calgary Power Ltd.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	405x	270	25	170	730	465	835	370	495	400	460	200
2.....	470	205	360	650	1,115	235	1,245	10	430	425	395	430
3.....	490	370	410	430	800	650	1,150	10	635	435	185	310
4.....	280	175	405	665	815	605	1,190	10	740	275	365	240
5.....	545	160	640	300	1,025	615	1,190	635	730	510	260	250
6.....	300	235	630	490	940	695	1,190	455	425	380	275	45
7.....	840	145	695	460	1,090	700	1,160	270	1,210	650	320	20
8.....	605	85	120	570	1,075	560	1,140	230	370	595	400	300
9.....	680	205	450	665	710	550	1,135	580	890	595	675	65
10.....	605	200	500	310	1,075	605	1,190	550	825	430	20	25
11.....	750	25	640	145	1,000	695	1,020	35	1,070	450	45	20
12.....	575	150	530	160	965	425	640	665	1,105	570	185	125
13.....	115	155	560	745	1,060	750	85	895	980	645	55	215
14.....	430	165	660	425	950	780	10	795	1,065	775	250	215
15.....	425	120	60	455	1,105	930	10	300	620	655	270	180
16.....	25	190	495	550	595	690	185	100	880	610	55	250
17.....	25	120	495	505	1,020	1,080	55	695	910	495	265	150
18.....	170	590	570	555	785	1,045	200	90	185	370	260	81
19.....	240	195	600	600	730	1,025	295	725	525	410	205	380
20.....	170	25	480	500	1,010	1,005	10	740	520	385	190	20
21.....	60	160	680	605	605	915	505	455	360	620	205	105
22.....	145	25	285	750	600	905	10	140	460	760	190	300
23.....	175	40	565	645	130	740	85	135	290	880	640	265
24.....	145	85	235	785	790	845	185	310	355	625	20	250
25.....	140	125	270	630	820	1,005	60	305	385	645	110	310
26.....	215	155	295	225	760	925	10	465	345	165	145	50
27.....	155	230	665	620	695	975	10	415	195	490	90	20
28.....	220	165	910	675	755	960	568	500	155	225	20	20
29.....	150	150	585	570	-	780	240	380	415	615	45	260
30.....	155	50	625	620	-	690	400	50	570	355	260	285x
31.....	120	-	770	645	-	665	-	340	-	295	115	-
Mean	317	166	491	520	848	758	534	376	618	508	225	180
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	19,490	9,860	30,170	31,970	47,110	46,630	31,750	23,120	36,770	31,210	13,830	10,680

The Year.....Discharge: Daily - Maximum 2 April, 1,245
 - Minimum at various times, 10
 Mean 459; Per Square Mile 1.27
 Runoff: Acre-feet 332,600; Depth in inches on drainage area 17.23

x - Calgary Power Ltd. data for flow through Barrier Plant 1 October to 30 September.

Location: Lat. 50° 37', long. 115° 07', in sec. 13, tp. 19, rge. 9, W. 5th Mer., Alberta, at dam at outlet to Kananaskis River. Gauge: Measuring point. Period of Record: Periods of varying length January 1932 to date. Extremes Recorded: Daily - Maximum (Regulated), 15 September 1958, 5,583.60 feet (new datum), Minimum (Regulated), 25 April 1942, 5,510.86 feet (new datum). Revisions: All published elevations to 30 September 1953 should be corrected by adding 1.73 feet. Remarks: Lake level affected by regulation at dam. Records supplied by Calgary Power Ltd. Elevations are referred to bench mark set in concrete at south end of main dam, elevation 5,584.71 feet. Daily elevations for the water years 1948 to 1955 are included in this paper.

Daily Elevations in Feet for Water Years 1947-48 and 1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1947-48												
1.....	-	-	-	-	-	-	-	-	5,536.06	5,553.55	5,566.00	5,577.25
2.....	-	-	-	-	-	-	-	-	5,536.52	5,554.10	-	-
3.....	5,580.60	-	-	-	5,550.61	-	-	-	-	-	-	-
4.....	5,580.87	-	-	-	-	-	-	-	5,538.10	-	-	-
5.....	-	-	-	-	-	-	-	-	-	-	-	-
6.....	5,581.00	5,579.30	-	-	-	-	-	-	5,539.47	-	-	-
7.....	-	-	-	-	-	-	-	-	-	-	-	-
8.....	5,581.25	-	-	-	-	-	-	-	-	-	5,568.94	-
9.....	5,581.10	5,578.65	-	-	-	-	5,532.67	5,528.28	-	-	-	-
10.....	5,581.10	-	-	-	-	-	-	-	-	-	-	-
11.....	-	5,578.10	-	-	-	5,539.92	-	-	-	5,557.40	-	5,579.45
12.....	-	-	-	-	-	-	-	-	-	-	-	-
13.....	-	-	-	-	-	-	-	-	-	-	-	5,579.95
14.....	-	-	-	-	-	-	-	-	-	-	5,571.04	-
15.....	-	-	5,566.98	-	-	-	-	-	-	-	-	5,580.45
16.....	-	5,576.85	-	-	-	-	-	-	5,545.73	-	-	-
17.....	-	5,576.58	-	-	-	-	-	-	-	-	-	5,580.90
18.....	-	5,576.35	-	-	-	-	-	-	-	-	-	5,580.80
19.....	-	5,575.90	-	-	-	-	-	5,528.32	-	-	-	5,580.78
20.....	-	-	-	-	-	-	5,530.42	-	5,547.65	-	-	-
21.....	-	-	-	-	-	-	-	-	-	-	-	5,580.80
22.....	5,580.80	-	-	-	-	-	-	-	5,548.60	-	5,574.09	-
23.....	5,580.90	5,574.80	-	-	-	-	-	-	-	-	-	-
24.....	5,580.91	-	-	-	-	-	-	-	-	-	-	-
25.....	-	-	-	-	-	-	-	-	-	-	-	-
26.....	5,581.15	-	-	-	-	-	-	-	5,550.95	-	-	-
27.....	5,581.20	-	-	-	-	-	-	5,533.27	-	-	5,575.76	5,580.73
28.....	5,581.30	-	-	-	-	-	-	5,533.67	-	5,564.11	5,576.02	5,580.72
29.....	5,581.15	-	-	-	-	-	5,529.02	-	-	-	5,576.35	5,580.75
30.....	-	-	-	-	-	-	-	-	-	-	-	-
31.....	5,580.70	-	-	-	-	-	-	5,535.54	-	-	5,576.90	-
1948-49												
1.....	5,580.80	-	-	-	-	-	-	-	-	-	-	-
2.....	5,580.82	-	-	-	-	-	-	-	-	-	-	-
3.....	-	-	-	-	-	-	-	-	-	-	-	-
4.....	-	-	-	-	-	-	-	-	-	-	-	-
5.....	-	-	-	-	-	-	-	-	-	-	-	-
6.....	-	-	-	-	-	-	-	-	-	-	-	-
7.....	-	-	-	-	-	-	5,530.94	-	5,537.22	5,546.43	-	-
8.....	5,580.92	-	-	-	-	-	5,530.70	-	-	-	-	-
9.....	-	5,577.50	-	-	-	-	-	-	-	-	-	-
10.....	-	5,577.45	-	-	-	-	-	-	-	-	-	-
11.....	5,580.93	-	-	-	-	-	-	-	-	-	-	5,565.85
12.....	5,580.94	-	-	-	-	-	-	5,528.12	-	-	-	-
13.....	-	-	-	-	-	-	-	5,528.26	-	-	-	-
14.....	-	-	-	-	-	-	-	5,528.50	-	-	-	-
15.....	-	-	5,566.29	-	-	-	-	5,528.80	-	-	-	-
16.....	-	-	5,566.01	-	-	-	-	5,529.06	-	-	-	-
17.....	-	5,576.50	-	-	-	-	-	-	5,541.14	-	-	-
18.....	5,580.76	-	-	5,554.58	-	-	-	-	-	-	5,560.40	-
19.....	5,580.62	-	-	-	-	-	-	-	-	-	-	5,567.23
20.....	-	-	-	-	-	-	-	-	-	-	-	-
21.....	-	-	-	-	-	-	-	-	5,542.16	-	-	-
22.....	-	-	-	-	-	-	-	-	-	-	-	-
23.....	5,580.10	-	-	-	-	-	-	-	-	-	-	5,567.51
24.....	-	-	-	-	5,542.55	-	-	-	-	-	-	-
25.....	-	-	-	-	-	-	-	-	-	-	-	-
26.....	-	-	-	-	-	-	-	-	-	-	-	-
27.....	-	-	-	-	-	-	-	-	-	-	-	5,567.98
28.....	-	-	-	-	-	-	-	-	-	-	-	-
29.....	-	-	-	-	-	-	-	-	-	-	-	-
30.....	-	-	-	-	-	-	-	-	-	-	5,563.11	-
31.....	-	-	-	-	-	-	-	5,533.89	-	-	-	-

Daily Elevations in Feet for Water Years 1949-50 and 1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1949-50												
1.....	-	-	-	-	-	-	-	-	-	-	-	5,573.58
2.....	-	-	-	-	-	-	-	-	-	-	-	5,573.90
3.....	5,568.67	-	-	-	-	-	-	-	-	-	-	-
4.....	-	-	-	-	-	-	-	-	-	-	-	-
5.....	-	-	-	-	-	-	-	-	-	-	-	-
6.....	5,568.92	-	-	-	-	-	-	-	-	-	-	-
7.....	-	-	5,559.05	-	-	-	-	-	-	-	-	-
8.....	-	-	-	-	-	-	-	-	5,531.20	5,550.75	-	-
9.....	-	-	-	-	-	-	-	-	-	-	-	5,576.02
10.....	-	-	-	-	-	-	-	-	-	5,552.10	-	-
11.....	-	-	-	-	-	-	-	-	-	-	-	5,576.48
12.....	-	-	-	-	-	-	-	-	-	5,553.05	-	-
13.....	-	-	-	-	-	-	-	-	-	-	-	-
14.....	-	-	-	-	-	-	-	-	-	-	5,567.58	-
15.....	-	-	-	-	-	-	-	-	-	-	-	5,577.33
16.....	-	-	-	-	5,540.47	-	-	-	-	-	-	-
17.....	-	-	-	-	-	-	-	-	5,535.65	-	-	5,577.69
18.....	-	-	-	-	-	-	-	-	-	-	5,569.09	-
19.....	-	-	5,555.56	-	-	-	-	5,528.39	-	-	-	-
20.....	-	-	-	-	-	-	-	-	-	-	5,570.48	5,578.27
21.....	5,569.76	-	-	-	-	-	-	-	-	-	-	-
22.....	-	5,562.99	-	-	-	-	-	-	-	-	5,570.48	-
23.....	-	-	-	-	-	-	-	-	-	-	-	5,578.85
24.....	-	-	-	-	-	-	-	-	-	-	-	5,578.87
25.....	-	-	-	-	-	-	-	-	-	-	-	-
26.....	-	-	-	-	-	-	-	-	-	-	-	-
27.....	5,569.92	-	-	-	-	-	5,529.96	-	-	-	-	-
28.....	-	-	-	-	-	-	-	-	-	-	-	-
29.....	5,570.02	-	-	-	-	-	-	5,529.55	-	-	-	-
30.....	5,569.75	-	-	-	-	5,534.49	-	-	-	-	-	-
31.....	-	-	-	-	-	-	-	-	-	-	-	-
1950-51												
1.....	-	-	-	-	-	-	-	5,529.53	-	-	-	5,577.73
2.....	-	-	-	-	-	-	-	-	-	5,546.75	-	5,578.11
3.....	-	-	-	5,556.35	-	-	-	-	-	-	-	5,578.33
4.....	-	5,575.84	-	-	-	-	-	-	-	-	-	-
5.....	-	5,575.54	-	-	-	-	-	-	5,535.36	5,548.50	-	-
6.....	-	-	-	-	-	-	-	-	5,535.63	5,549.35	-	-
7.....	-	-	-	-	-	-	-	-	5,535.80	5,550.10	-	-
8.....	5,578.31	-	-	-	-	-	-	-	5,535.98	5,550.75	-	5,579.55
9.....	-	-	-	-	-	-	-	-	5,536.07	5,551.35	5,570.47	-
10.....	-	-	-	-	-	-	-	-	-	5,552.00	-	5,580.10
11.....	-	-	-	-	-	-	-	-	-	-	-	5,580.45
12.....	-	-	-	-	-	-	-	-	5,536.94	-	-	-
13.....	5,578.00	-	5,562.66	-	-	-	-	-	5,537.42	-	-	-
14.....	-	5,572.18	-	-	-	5,537.35	-	-	-	5,554.70	-	5,581.15
15.....	5,577.95	-	5,562.20	-	-	-	-	5,529.35	-	-	5,572.56	5,581.15
16.....	-	-	-	-	-	-	-	5,529.52	5,539.67	5,556.20	5,572.87	-
17.....	-	-	-	-	-	-	-	5,529.79	5,540.45	-	-	-
18.....	-	-	-	-	-	-	-	-	5,541.24	5,557.50	-	-
19.....	-	-	-	-	-	-	-	-	5,541.55	-	-	-
20.....	-	-	-	-	-	-	-	-	-	5,559.14	-	5,580.93
21.....	-	-	-	-	-	-	-	-	-	-	5,574.47	-
22.....	-	-	-	-	-	-	-	-	-	-	-	5,580.82
23.....	-	-	-	-	-	-	-	-	5,543.52	-	5,575.24	5,580.82
24.....	-	-	-	-	-	-	-	-	-	-	5,575.51	5,580.82
25.....	-	-	-	-	-	-	-	-	-	-	5,575.87	-
26.....	-	-	-	-	-	-	-	-	-	-	-	-
27.....	-	-	-	-	-	-	-	-	-	-	5,576.33	-
28.....	-	-	-	-	-	-	-	-	-	-	5,576.63	-
29.....	-	-	-	-	-	-	-	-	-	-	5,576.86	-
30.....	-	-	-	-	-	-	-	-	-	-	-	-
31.....	-	-	-	-	-	-	-	-	-	-	-	-

Daily Elevations in Feet for Water Years 1953-54 and 1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1953-54												
1.....	-	-	-	-	-	-	-	-	-	5,548.11	-	5,578.43
2.....	5,579.73	-	-	-	-	-	-	-	-	-	-	5,578.63
3.....	-	5,582.23	-	-	-	-	-	-	-	-	-	5,579.03
4.....	-	5,582.26	-	-	-	-	-	-	-	-	-	-
5.....	-	-	-	-	-	-	-	-	-	-	-	-
6.....	-	5,582.07	-	-	-	-	-	-	-	-	-	-
7.....	-	-	-	5,561.88	-	-	-	-	-	-	-	5,580.17
8.....	-	-	-	-	-	-	-	-	-	-	-	5,580.48
9.....	-	-	-	-	-	-	-	-	-	-	-	5,580.61
10.....	-	-	-	-	-	-	-	-	5,537.70	-	-	5,580.93
11.....	-	-	-	-	-	-	-	5,530.24	-	5,555.40	-	5,581.23
12.....	-	-	-	-	-	-	-	-	-	-	-	5,581.43
13.....	-	-	-	-	-	-	5,535.75	5,530.34	-	-	5,571.43	5,581.63
14.....	-	-	-	-	-	-	-	-	-	5,556.97	-	5,581.93
15.....	5,581.19	-	-	-	-	-	-	-	-	-	5,572.03	5,582.13
16.....	5,581.23	-	-	-	-	-	-	-	-	-	5,572.33	5,582.23
17.....	-	-	-	-	-	-	-	-	-	-	5,572.83	5,582.33
18.....	-	5,578.14	-	-	-	-	-	-	-	-	5,573.13	5,582.39
19.....	-	-	-	-	-	-	-	-	5,541.78	-	5,573.43	5,582.41
20.....	-	-	-	-	-	-	-	-	-	-	5,574.03	5,582.45
21.....	-	-	-	-	-	-	-	-	-	-	5,574.43	5,582.50
22.....	-	-	-	-	-	-	-	-	-	-	5,574.83	5,582.54
23.....	-	-	-	-	-	-	-	-	-	-	5,575.13	5,582.54
24.....	-	-	-	-	5,546.83	-	-	-	5,543.73	-	5,575.43	5,582.55
25.....	-	-	-	-	-	-	-	-	-	-	5,576.03	5,582.55
26.....	-	-	-	-	-	-	-	-	-	-	5,576.33	5,582.58
27.....	-	-	-	-	-	-	-	5,533.24	-	-	5,576.63	5,582.62
28.....	-	-	-	-	-	-	-	-	-	-	5,577.03	5,582.67
29.....	-	-	-	-	-	-	-	-	5,546.88	-	5,577.43	5,582.67
30.....	-	-	-	-	-	-	-	-	5,547.43	-	5,577.73	5,582.69
31.....	-	-	-	-	-	-	-	-	-	-	5,578.03	-
1954-55												
1.....	5,582.69	5,580.48	5,569.78	5,557.51	5,546.72	-	5,529.91	-	-	5,546.57	5,564.57	5,574.79
2.....	5,582.69	5,580.25	5,569.32	5,557.10	5,546.33	-	-	5,530.21	5,532.49	-	5,564.92	5,575.11
3.....	5,582.69	5,579.90	5,568.85	5,556.68	5,546.00	-	-	-	-	-	5,565.17	-
4.....	5,582.69	5,579.57	5,568.47	5,556.27	-	-	5,529.66	-	-	5,547.70	5,565.59	-
5.....	5,582.67	5,579.24	5,568.10	-	-	-	5,529.65	-	-	5,548.27	5,566.05	-
6.....	5,582.64	5,578.92	5,567.73	-	-	-	5,529.68	5,530.25	5,533.09	5,548.61	-	-
7.....	5,582.60	5,578.60	5,567.30	-	-	-	5,529.69	-	-	5,549.08	-	5,576.64
8.....	5,582.56	5,578.28	5,566.88	-	-	-	-	-	5,533.39	5,549.49	5,567.14	5,576.95
9.....	-	5,577.98	5,566.55	-	-	-	-	5,530.39	5,533.55	-	5,567.56	5,577.32
10.....	-	5,577.62	5,566.22	-	-	-	-	-	5,533.88	-	5,567.96	-
11.....	5,582.50	5,577.29	5,565.88	-	-	-	5,529.80	-	5,534.33	5,550.99	5,568.28	-
12.....	5,582.50	5,576.95	5,565.47	-	-	-	5,529.83	5,530.56	5,534.87	5,551.56	5,568.62	5,577.95
13.....	5,582.47	5,576.65	5,565.06	5,553.31	-	-	-	5,530.59	5,535.56	5,552.20	-	5,578.24
14.....	5,582.45	5,576.35	5,564.65	-	-	-	-	-	5,536.16	5,552.88	-	5,578.43
15.....	5,582.35	5,576.04	5,564.25	5,552.58	-	5,533.58	5,529.92	-	5,536.80	5,554.29	5,569.75	5,578.56
16.....	5,582.28	5,575.74	5,563.90	-	-	-	-	5,530.68	5,537.43	-	5,570.15	-
17.....	5,582.21	5,575.30	5,563.55	-	-	-	-	5,530.72	5,537.91	-	5,570.43	-
18.....	5,582.10	5,574.81	5,563.11	-	-	5,532.79	5,529.99	5,530.77	-	5,555.93	5,570.69	-
19.....	5,582.04	5,574.48	5,562.67	-	-	-	-	5,530.81	-	5,556.71	5,571.01	5,579.30
20.....	5,581.92	-	5,562.22	-	-	-	-	-	5,539.34	5,557.64	-	5,579.50
21.....	5,581.75	-	-	-	-	5,531.93	5,530.10	-	5,539.95	5,558.47	-	-
22.....	5,581.68	5,573.28	-	-	-	-	-	-	5,540.34	5,559.19	5,571.95	5,579.71
23.....	5,581.57	5,572.95	-	-	-	-	-	-	5,541.13	-	5,572.45	5,579.89
24.....	5,581.46	5,572.50	-	-	-	-	-	5,531.60	5,542.06	-	5,572.62	-
25.....	5,581.35	5,572.21	-	-	-	-	5,530.17	-	5,542.86	5,561.05	5,572.92	-
26.....	5,581.22	5,571.95	-	-	-	-	-	5,531.74	-	5,561.75	5,573.20	5,580.41
27.....	5,581.09	5,571.41	-	-	-	-	5,530.19	5,531.78	5,544.24	5,562.28	-	5,580.56
28.....	5,581.00	5,571.03	5,559.17	-	-	5,530.33	-	-	5,544.84	5,562.77	-	5,580.68
29.....	5,580.86	5,570.66	5,558.76	-	-	-	5,530.20	-	5,545.50	5,563.13	5,573.97	5,580.86
30.....	5,580.74	5,570.23	5,558.34	-	-	5,530.18	-	5,532.10	5,545.98	-	5,574.21	5,580.92
31.....	5,580.62	-	5,557.93	5,546.97	-	5,530.01	-	5,532.13	-	-	5,574.54	-

Daily Elevations in Feet for Water Year 1957-58

[illegible]

Location: Lat. 50° 38', long. 115° 08', in sec. 25, tp. 19, rge. 9, W. 5th Mer., Alberta, at the mouth of Boulton Creek. **Gauge:** Measuring point. **Period of Record:** Periods of varying length March 1936 to date. Records prior to August 1955 from staff gauge near present site. **Extremes Recorded:** Maximum (Regulated) 10 m above August 1956, 5,469.2 feet (new datum), Minimum (Regulated) 9 April 1956, 5,423.50 feet (new datum). **Revisions:** All published records prior to 1 October 1952 should be corrected by adding 1.01 feet. **Remarks:** Lake level affected by storage behind Pocaterra Dam since July 1955. Records supplied by Calgary Power Ltd. Elevations are referred to Calgary Power Ltd. bench mark set in concrete near gauge, elevations 5,433.79 feet. Daily elevations for the water years 1948 to 1955 are included in this paper.

Daily Elevations in Feet for Water Years 1947-48 and 1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1947-48												
1.....	-	5,431.53	-	-	-	-	-	-	5,431.02	-	-	-
2.....	-	-	-	-	-	-	-	-	-	-	-	5,430.27
3.....	-	5,431.53	-	-	-	-	-	-	-	-	-	-
4.....	-	-	-	-	-	-	-	-	-	-	5,430.53	-
5.....	-	-	-	-	-	-	-	-	-	-	-	-
6.....	5,431.15	-	-	-	-	-	-	-	5,430.95	-	5,430.50	-
7.....	5,431.14	-	-	-	-	-	-	-	-	-	-	5,430.22
8.....	-	5,431.53	-	-	-	-	-	-	-	-	5,430.52	-
9.....	5,431.18	5,431.53	-	-	-	-	-	-	-	-	-	-
10.....	-	-	-	-	-	-	-	-	5,430.99	5,430.46	-	5,430.20
11.....	-	5,431.52	-	-	-	-	-	-	-	-	-	-
12.....	-	5,431.51	-	-	-	-	-	-	5,430.87	-	-	-
13.....	-	5,431.51	-	-	-	-	-	-	-	-	-	-
14.....	-	-	-	-	-	-	-	-	-	-	5,430.43	-
15.....	-	5,431.51	-	-	-	-	-	-	5,430.87	5,430.46	-	-
16.....	-	-	-	-	-	-	-	-	-	-	-	5,430.19
17.....	-	5,431.49	-	-	-	-	-	-	5,430.80	5,430.42	-	-
18.....	-	5,431.65	-	-	-	-	-	-	-	-	-	5,430.82
19.....	-	-	-	-	-	-	-	-	5,430.76	-	-	5,431.11
20.....	-	5,431.72	-	-	-	-	-	-	-	-	-	-
21.....	-	-	-	-	-	-	-	-	-	-	-	-
22.....	-	-	-	-	-	-	-	-	-	-	-	5,431.11
23.....	-	-	-	-	-	-	-	-	-	-	-	-
24.....	5,430.75	-	-	-	-	-	-	-	-	-	-	-
25.....	-	5,430.91	-	-	-	-	-	-	-	-	-	-
26.....	-	-	-	-	-	-	-	-	-	5,430.38	5,430.34	-
27.....	-	-	-	-	-	-	-	-	-	-	-	-
28.....	-	-	-	-	-	-	-	-	-	-	-	-
29.....	5,431.12	-	-	-	-	-	-	-	-	-	5,430.32	5,431.02
30.....	5,431.39	-	-	-	-	-	-	-	-	5,430.54	-	-
31.....	5,431.48	-	-	-	-	-	-	-	-	-	-	-
1948-49												
1.....	-	-	-	-	-	-	-	-	-	-	-	-
2.....	-	-	-	-	-	-	-	-	-	-	5,430.19	-
3.....	-	-	-	-	-	-	-	-	-	5,430.28	-	5,430.09
4.....	-	-	-	-	-	-	-	-	-	-	-	-
5.....	-	-	-	-	-	-	-	-	-	5,430.28	5,430.19	-
6.....	-	-	-	-	-	-	-	-	-	-	5,430.18	-
7.....	-	-	-	-	-	-	-	-	-	-	-	5,430.08
8.....	-	-	-	-	-	-	-	-	5,430.57	-	-	-
9.....	-	-	-	-	-	-	-	-	-	-	-	-
10.....	-	-	-	-	-	-	-	-	-	5,430.25	-	5,430.08
11.....	-	-	-	-	-	-	-	-	5,430.48	-	5,430.13	-
12.....	-	-	-	-	-	-	-	-	5,430.45	-	-	5,430.09
13.....	-	-	-	-	-	-	-	-	-	-	-	-
14.....	-	-	-	-	-	-	-	-	5,430.39	-	-	-
15.....	-	-	-	-	-	-	-	-	-	5,430.22	5,430.11	-
16.....	-	-	-	-	-	-	-	-	-	-	-	-
17.....	-	-	-	-	-	-	-	-	-	5,430.20	-	5,430.07
18.....	5,430.87	-	-	-	-	-	-	-	-	-	5,430.08	5,430.07
19.....	5,431.04	-	-	-	-	-	-	-	5,430.35	-	-	-
20.....	-	-	-	-	-	-	-	-	-	-	-	-
21.....	-	-	-	-	-	-	-	-	-	5,430.18	5,430.07	-
22.....	-	-	-	-	-	-	-	-	-	-	-	-
23.....	-	-	-	-	-	-	-	-	-	-	5,430.07	5,430.08
24.....	-	-	-	-	-	-	-	-	5,430.35	-	-	-
25.....	-	-	-	-	-	-	-	-	-	5,430.19	-	5,430.07
26.....	-	-	-	-	-	-	-	-	-	-	5,430.07	-
27.....	5,431.14	-	-	-	-	-	-	-	-	-	-	-
28.....	5,431.14	-	-	-	-	-	-	-	5,430.35	5,430.24	-	5,430.06
29.....	-	-	-	-	-	-	-	-	-	-	5,430.07	-
30.....	-	-	-	-	-	-	-	-	-	5,430.19	-	-
31.....	-	-	-	-	-	-	-	-	-	-	-	-

Daily Elevations in Feet for Water Years 1951-52 and 1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1951-52												
1.....	-	-	-	-	-	-	-	-	-	-	-	-
2.....	-	-	-	-	-	-	-	-	-	-	-	5,430.09
3.....	-	-	-	-	-	-	-	-	5,430.29	5,430.36	-	-
4.....	-	-	-	-	-	-	-	-	-	-	-	-
5.....	-	-	-	-	-	-	-	-	5,430.36	-	-	5,430.08
6.....	-	-	-	-	-	-	-	-	-	-	5,430.20	-
7.....	-	-	-	-	-	-	-	-	-	-	-	5,430.11
8.....	-	-	-	-	-	-	-	-	-	-	5,430.18	-
9.....	-	-	-	-	-	-	-	-	-	-	-	5,430.12
10.....	-	-	-	-	-	-	-	-	-	5,430.32	-	-
11.....	-	-	-	-	-	-	-	-	5,430.30	-	-	-
12.....	-	-	-	-	-	-	-	-	-	5,430.29	-	-
13.....	-	-	-	-	-	-	-	-	-	-	-	-
14.....	-	-	-	-	-	-	-	-	5,430.38	-	5,430.17	-
15.....	-	-	-	-	-	-	-	-	-	-	5,430.23	-
16.....	-	-	-	-	-	-	-	-	-	5,430.25	-	5,430.14
17.....	-	-	-	-	-	-	-	-	5,430.32	-	5,430.21	-
18.....	-	-	-	-	-	-	-	-	-	-	-	5,430.02
19.....	-	-	-	-	-	-	-	-	-	5,430.28	-	-
20.....	-	-	-	-	-	-	-	-	5,430.26	-	-	5,430.17
21.....	-	-	-	-	-	-	-	-	5,430.28	-	-	-
22.....	-	-	-	-	-	-	-	-	5,430.49	5,430.31	-	-
23.....	-	-	-	-	-	-	-	-	-	-	5,430.13	-
24.....	-	-	-	-	-	-	-	-	-	-	-	-
25.....	-	-	-	-	-	-	-	-	-	5,430.27	-	-
26.....	-	-	-	-	-	-	-	5,430.40	5,430.45	-	5,430.14	5,430.11
27.....	-	-	-	-	-	-	-	-	-	5,430.25	-	-
28.....	-	-	-	-	-	-	-	-	-	-	-	-
29.....	-	-	-	-	-	-	-	-	5,430.45	-	5,430.09	-
30.....	-	-	-	-	-	-	-	5,430.37	-	5,430.23	-	-
31.....	-	-	-	-	-	-	-	-	-	5,430.20	-	-
1952-53												
1.....	-	-	-	-	-	-	-	-	-	5,431.23	-	-
2.....	5,430.80	-	-	-	-	-	-	-	-	5,431.33	-	-
3.....	5,430.80	-	-	-	-	-	-	-	5,431.42	-	5,430.91	-
4.....	5,430.79	5,430.77	-	-	-	-	-	-	5,431.46	-	-	5,430.78
5.....	-	5,431.83	-	-	-	-	-	-	-	-	-	-
6.....	-	-	-	-	-	-	-	-	5,431.43	-	-	-
7.....	5,430.78	-	-	-	-	-	-	-	-	-	5,430.91	-
8.....	-	5,432.43	-	-	-	-	-	-	5,431.56	5,431.32	-	-
9.....	-	-	-	-	-	-	-	-	5,431.63	-	5,430.98	5,430.79
10.....	-	5,432.43	-	-	-	-	-	-	-	-	-	-
11.....	5,430.73	-	-	-	-	-	-	-	5,431.57	-	-	-
12.....	-	-	-	-	-	-	-	-	-	5,431.28	-	5,430.73
13.....	5,430.78	-	-	-	-	-	-	-	-	-	-	-
14.....	-	-	-	-	-	-	-	-	-	-	5,430.89	5,430.71
15.....	-	-	-	-	-	-	-	-	-	-	-	-
16.....	-	5,432.42	-	-	-	-	-	-	5,431.53	-	-	-
17.....	-	-	-	-	-	-	-	-	5,431.53	5,431.18	-	-
18.....	5,430.73	-	-	-	-	-	-	-	-	-	-	-
19.....	-	-	-	-	-	-	-	-	-	-	-	5,430.66
20.....	-	-	-	-	-	-	-	-	5,431.42	5,431.17	5,430.81	-
21.....	5,430.72	-	-	-	-	-	-	-	-	-	-	-
22.....	-	-	-	-	-	-	-	-	-	-	-	-
23.....	-	-	-	-	-	-	-	-	5,431.29	-	-	-
24.....	-	-	-	-	-	-	-	-	5,431.29	5,431.08	5,430.78	5,430.65
25.....	5,430.72	-	-	-	-	-	-	-	-	-	-	-
26.....	-	-	-	-	-	-	-	-	5,431.26	-	-	-
27.....	-	5,432.40	-	-	-	-	-	-	-	-	5,430.71	-
28.....	-	-	-	-	-	-	-	-	-	-	-	-
29.....	5,430.74	-	-	-	-	-	-	-	-	-	-	-
30.....	-	-	-	-	-	-	-	-	-	-	5,430.78	5,430.64
31.....	5,430.73	-	-	-	-	-	-	-	-	5,430.97	-	-

Daily Elevations in Feet for Water Years 1953-54 and 1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1953-54												
1.....	-	-	-	-	-	-	-	-	-	-	-	5,431.40
2.....	-	-	-	-	-	-	-	-	-	-	-	5,431.30
3.....	5,430.73	5,430.73	-	-	-	-	-	-	-	-	-	5,431.30
4.....	-	-	-	-	-	-	-	-	-	-	-	-
5.....	5,430.73	-	-	-	-	-	-	-	-	-	-	-
6.....	-	-	-	-	-	-	-	-	-	-	-	-
7.....	-	-	-	-	-	-	-	-	-	-	-	-
8.....	-	-	-	-	-	-	-	-	-	-	-	-
9.....	5,430.63	-	-	-	-	-	-	-	-	-	-	5,431.30
10.....	-	5,432.42	-	-	-	-	-	-	-	-	-	5,431.30
11.....	-	-	-	-	-	-	-	-	-	-	-	5,431.30
12.....	5,430.62	-	-	-	-	-	-	-	-	-	-	5,431.30
13.....	-	-	-	-	-	-	-	-	-	-	5,431.30	5,431.20
14.....	-	-	-	-	-	-	-	-	-	5,431.74	5,431.30	5,431.20
15.....	-	-	-	-	-	-	-	-	-	-	5,431.30	5,431.20
16.....	-	-	-	-	-	-	-	-	-	-	5,431.30	-
17.....	-	-	-	-	-	-	-	-	-	-	5,431.30	5,431.30
18.....	-	5,432.21	-	-	-	-	-	-	-	-	5,431.30	5,431.60
19.....	-	-	-	-	-	-	-	-	-	-	5,431.30	5,431.80
20.....	5,430.64	-	-	-	-	-	-	-	-	-	5,431.40	5,431.90
21.....	-	-	-	-	-	-	-	-	-	-	5,431.40	5,432.00
22.....	-	-	-	-	-	-	-	-	-	-	5,431.40	5,432.00
23.....	-	-	-	-	-	-	-	-	-	-	5,431.40	5,432.00
24.....	-	-	-	-	-	-	-	-	-	-	5,431.40	5,432.00
25.....	5,430.62	-	-	-	-	-	-	-	-	-	5,431.40	5,432.00
26.....	-	-	-	-	-	-	-	-	-	-	5,431.40	5,432.00
27.....	5,430.63	-	-	-	-	-	-	-	-	-	5,431.40	5,432.00
28.....	-	-	-	-	-	-	-	-	-	-	5,431.40	5,432.00
29.....	-	-	-	-	-	-	-	-	-	-	5,431.40	5,432.00
30.....	-	-	-	-	-	-	-	-	-	-	5,431.40	5,432.00
31.....	-	-	-	-	-	-	-	-	-	-	5,431.40	-
1954-55												
1.....	5,432.01	5,431.87	5,432.23	-	-	-	5,431.41	-	-	5,433.41	5,451.02	5,457.32
2.....	5,432.01	5,432.12	-	-	-	-	-	5,430.54	5,431.03	-	5,451.35	5,457.42
3.....	5,432.01	5,432.29	-	-	-	-	-	-	-	-	5,451.71	-
4.....	5,432.01	5,432.30	-	5,432.08	-	-	5,431.33	-	-	5,435.14	5,451.98	-
5.....	5,432.01	5,432.30	-	-	-	-	5,431.28	-	-	5,435.95	5,452.23	-
6.....	5,432.01	5,432.29	5,432.23	-	-	-	5,431.00	5,430.55	5,431.16	5,437.53	-	-
7.....	5,431.99	5,432.29	5,432.23	-	-	-	5,430.98	-	-	5,438.34	-	5,458.07
8.....	5,431.99	5,432.28	5,432.23	-	-	-	-	-	5,431.26	5,438.85	5,453.00	5,458.23
9.....	-	5,432.27	5,432.23	-	-	-	-	5,430.64	5,431.28	-	5,453.25	5,458.42
10.....	-	5,432.23	5,432.23	-	-	-	-	-	5,431.30	-	5,453.46	-
11.....	-	5,432.23	5,432.23	-	-	-	5,430.87	-	5,431.40	5,440.63	5,453.70	-
12.....	5,431.95	5,432.22	5,432.22	-	-	-	5,430.85	5,430.82	5,431.50	5,441.33	5,453.92	5,458.77
13.....	5,431.94	5,432.20	5,432.22	-	-	-	-	5,430.83	5,431.55	5,442.08	-	5,458.88
14.....	5,431.91	5,432.18	5,432.21	-	-	-	-	-	5,431.55	5,442.90	-	5,458.99
15.....	5,431.90	5,432.17	5,432.20	-	-	-	5,430.83	-	5,431.50	5,443.72	5,454.52	-
16.....	5,431.90	-	-	-	-	-	-	5,430.83	5,431.45	-	5,454.67	-
17.....	5,431.92	5,432.29	-	-	-	-	-	5,430.83	5,431.39	-	5,454.90	-
18.....	5,431.94	5,432.29	-	-	-	5,431.80	5,430.76	5,430.83	-	5,444.93	5,455.06	-
19.....	5,431.94	5,432.29	-	-	-	-	-	5,430.87	-	5,445.70	5,455.27	5,459.45
20.....	5,431.93	-	5,432.20	-	-	-	-	-	5,431.32	5,446.24	-	5,459.54
21.....	5,431.92	-	-	-	-	5,431.78	5,430.74	-	5,431.30	5,446.73	-	-
22.....	5,431.92	5,432.29	-	-	-	-	-	-	5,431.30	5,447.26	5,455.82	5,459.74
23.....	-	5,432.29	-	-	-	-	-	-	5,431.38	-	5,456.02	5,459.82
24.....	-	5,432.28	-	-	-	-	-	-	5,431.01	5,431.40	5,456.17	-
25.....	5,431.91	5,432.28	-	-	-	-	-	-	5,431.54	5,448.60	5,456.32	-
26.....	5,431.90	5,432.26	-	-	-	-	-	5,431.01	-	5,449.01	5,456.47	5,460.07
27.....	5,431.90	5,432.26	-	-	-	-	5,430.66	5,431.01	5,431.94	5,449.42	-	5,460.15
28.....	5,431.89	5,432.26	-	-	-	-	-	5,430.96	5,449.75	-	-	5,460.23
29.....	5,431.87	5,432.26	-	-	-	5,430.60	-	5,431.93	5,450.13	5,456.90	5,460.31	-
30.....	-	5,432.24	-	-	-	5,431.47	-	5,431.01	5,432.63	-	5,456.04	5,460.37
31.....	-	-	-	-	-	5,431.45	-	5,431.01	-	-	5,457.17	-

GHOST RIVER NEAR BLACK ROCK MOUNTAIN - STATION No. 5BG₂

Location: Lat. 51° 18', long. 115° 11', in SE. 1/4 sec. 15, tp. 27, rge. 9, W. 5th Mer., Alberta, immediately above head of diversion canal to Minnewanka Lake, about two miles south of peak of Black Rock Mountain and nineteen miles northeast of Banff. Drainage Area: 81 square miles. Period of Record: Continuous June 1941 to December 1947 and April 1949 to December 1954; periods of varying length 1955 to date. Records prior to 29 August 1947 obtained by recorder at present site; most of the later records have been obtained by summation of discharges at Ghost River Diversion Canal and Ghost River overflow stations near Black Rock Mountain. Average Discharge: (11 years) - 94.0 cfs. Extremes Recorded: Daily - Maximum, 13 June 1953, 2,029 cfs, Minimum, 8 May 1944, 10.3 cfs. Remarks: Data supplied by Calgary Power Ltd.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	17.7e	24.6	302	413	134	64	67	39.4	-
2.....	-	-	-	17.7e	30.7	348	404	129	63	67	38.5	-
3.....	-	-	-	17.7e	30.0	335	366	120	63	66	38.5	-
4.....	-	-	-	18.7	34.4	352	350	118	64	66	38.5	-
5.....	-	-	-	17.7	44.6	324	343	110	64	63	37.7	-
6.....	-	-	-	17.3	62	298	411	105	64	60	37.7	-
7.....	-	-	-	17.7	95	275	376	102	64	60	36.1	-
8.....	-	-	-	17.7	136	249	376	98	66	58	36.1	-
9.....	-	-	-	18.7	205	245	322	94	64	55	36.1	-
10.....	-	-	-	17.3	237	213	282	89	64	53	35.3	-
11.....	-	-	-	18.2	253	187	264	86	63	52	35.3	-
12.....	-	-	-	20.0	265	182	271	84	68	52	35.3	28.5e
13.....	-	-	-	26.4	198	174	303	81	109e	51	-	-
14.....	-	-	-	25.7	230	185	304	79	125	50	-	-
15.....	-	-	-	21.1	298	187	284	77	126	50	-	-
16.....	-	-	-	19.5	346	174	251	75	120	49	-	-
17.....	-	-	-	19.1	289	168	229	73	114	48	-	-
18.....	-	-	-	19.1	264	198	209	72	106	48	-	-
19.....	-	-	-	19.1	316	242	193	74	99	48	-	-
20.....	-	-	-	19.5	396	255	177	72	94	46	-	-
21.....	-	-	-	20.0	391	208	165	71	87	46	30e	-
22.....	-	-	-	19.5	394	190	165	69	81e	45	-	-
23.....	-	-	-	18.7	384	182	228	68	69	45	-	-
24.....	-	-	-	19.1	376	170	196	68	75	43	-	-
25.....	-	-	-	18.7	370	163	170	67	74	43	-	-
26.....	-	-	-	18.2	337	156	172	67	72	42	-	-
27.....	-	-	-	17.7	289	156	179	63	71	41	-	-
28.....	-	-	-	17.7	275	267	172	63	71	41	-	-
29.....	-	-	-	18.7	275	267	161	63	69	40.2	-	-
30.....	-	-	-	20.0	310	349	153	62	68	39.4	-	-
31.....	-	-	-	-	249	-	146	62	-	40.2	-	-
Mean	-	-	-	19.1	239	233	259	83.7	80.0	50.8	32.8e	-
Per sq. mi.	-	-	-	0.24	2.95	2.88	3.20	1.03	0.99	0.63	0.40	-
Acre-feet	-	-	-	1,140	14,690	13,890	15,940	5,150	4,760	3,120	1,950	-

The Period..... Discharge: Daily - Maximum 1 July, 413
 (244 days) - Minimum 6 and 10 April, 17.3
 Mean 125.3
 Runoff: Acre-feet 60,640

The discharge at this station equals the combined flow of the Ghost River Diversion Canal and the Ghost River Overflow near Black Rock Mountain.
 e - Estimated.

Location: Lat. 51° 18', long. 115° 11', in E. 1/2 sec. 15, tp. 27, rge. 9, W. 5th Mer., Alberta, immediately below headgate of diversion canal to Minnewanka Lake and nineteen miles northeast of Banff. Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: April 1949 to date. Average Discharge: (9 years) - 30.5 cfs. Extremes Recorded: Daily - Maximum (Regulated) 13 June 1953, 2,020 cfs, Minimum, (Regulated) Nil at many times; Instantaneous Maximum (Regulated) - 3 a.m., 13 June 1953, 4,450 cfs. Remarks: Records supplied by Calgary Power Ltd. Records prior to October 1950 were not published but are available from the District Engineer at Calgary, for address see page 8. Water is diverted from Ghost River to Minnewanka Lake at a point upstream from this station. Remaining Ghost River flow passes this station but is also diverted to Minnewanka Lake at Devil's Gap downstream. An appreciable portion of the total diversion returns to river channel by seepage.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	Nil	Nil	Nil	Nil	Nil	11	60	0	0	Nil	Nil	Nil
2.....	"	"	"	"	"	20	65e	0	0	"	Nil	"
3.....	"	"	"	"	"	16	43e	0	0	"	"	"
4.....	"	"	"	"	"	15	36	0	0	"	"	"
5.....	"	"	"	"	"	8e	36	0	0	"	"	"
6.....	"	"	"	"	"	2e	72	0	0	"	"	"
7.....	"	"	"	"	Nil	10	53	0	0	"	"	"
8.....	"	"	"	"	0	7	50	0	0	"	"	"
9.....	"	"	"	"	0	9	61e	0	0	"	"	"
10.....	"	"	"	"	1e	8	11e	0	0	"	Nil	"
11.....	"	"	"	"	1e	5e	3e	0	0	"	0	"
12.....	"	"	"	"	2e	0	6e	0	0	"	3e	"
13.....	"	"	"	"	0	0	10e	0	0	"	0	"
14.....	"	"	"	"	0	0	11e	0	0	"	Nil	"
15.....	"	"	"	"	9e	0	8e	0	0	"	"	"
16.....	"	"	"	"	34	0	5e	0	0	"	"	"
17.....	"	"	"	"	18	0	3e	0	0	"	"	"
18.....	"	"	"	"	14	0	1e	0	0	"	"	"
19.....	"	"	"	"	23	0	0	0	0	"	"	"
20.....	"	"	"	"	52e	1e	0	0	0	"	"	"
21.....	"	"	"	"	72	0	0	0	0	"	"	"
22.....	"	"	"	"	66	0	0	0	0	"	"	"
23.....	"	"	"	"	56	0	0	0	8e	"	"	"
24.....	"	"	"	"	53	0	0	0	0	"	"	"
25.....	"	"	"	"	51	0	0	0	0	"	"	"
26.....	"	"	"	"	44	0	0	0	0	"	"	"
27.....	"	"	"	"	45e	0	0	0	0	"	"	"
28.....	"	"	"	"	4	2	0	0	0	"	"	"
29.....	"	-	"	"	2e	0	0	0	0	"	"	"
30.....	"	-	"	"	8	23e	0	0	0	"	Nil	"
31.....	"	-	"	-	3	-	0	0	-	Nil	-	Nil
Mean	Nil	Nil	Nil	Nil	18.0	0.46	17.2	0	0.27	Nil	0.10	Nil
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	Nil	Nil	Nil	Nil	1,110	268	1,060	0	16	Nil	6	Nil

The Year..... Discharge: Daily - Maximum 21 May and 6 July, 72
 - Minimum at various times, Nil
 Instantaneous Maximum 4:30 p.m., 9 July, 182
 Mean 3.40
 Runoff: Acre-feet 2,460

e - Estimated.

Discharge at this station occurs only during periods of high river flow.

Source: Ghost River. Location: Lat. 51° 18', long. 115° 11', in SE. 1/4 sec. 15, tp. 27, rge. 9, W. 5th Mer., Alberta, near headgate on Ghost River about four miles northeast of east end of Minnewanka Lake and nineteen miles northeast of Banff. Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: Continuous April 1949 to December 1954; periods of varying length 1947 and 1955 to date; miscellaneous measurements October 1947 to January 1948. Average Discharge: (5 years) - 63.5 cfs. Extremes Recorded: Daily - Maximum, 16 June 1950, 1,040 cfs (estimated); Instantaneous Maximum - 2 p.m., 16 June 1950, 1,170 cfs. Remarks: Water is diverted to Minnewanka Lake. An appreciable portion of the diversion returns to the river channel by seepage from the canal. Some of this seepage loss is again diverted to Minnewanka Lake at Devil's Gap downstream. Records supplied by Calgary Power Ltd.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	17.7e	24.6	291	353	134	64	67	39.4	-
2.....	-	-	-	17.7e	30.7	328	339	129	63	67	38.5	-
3.....	-	-	-	17.7e	30.0	319	323	120	63	66	38.5	-
4.....	-	-	-	18.7	34.4	337	314	118	64	66	38.5	-
5.....	-	-	-	17.7	44.6	316	307	110	64	63	37.7	-
6.....	-	-	-	17.3	62	296	339	105	64	60	37.7	-
7.....	-	-	-	17.7	95	265	323	102	64	60	36.1	-
8.....	-	-	-	17.7	136	242	326	98	66	58	36.1	-
9.....	-	-	-	18.7	205	236	261	94	64	55	36.1	-
10.....	-	-	-	17.3	236	205	271	89	64	53	35.3	-
11.....	-	-	-	18.2	252	182	261	86	63	52	35.3	-
12.....	-	-	-	20.0	263	182	265	84	68	52	32.3	28.5x
13.....	-	-	-	26.4	198	174	293	81	109e	51	-	-
14.....	-	-	-	25.7	230	185	293	79	125	50	-	-
15.....	-	-	-	21.1	289	187	276	77	126	50	-	-
16.....	-	-	-	19.5	312	174	246	75	120	49	-	-
17.....	-	-	-	19.1	271	168	226	73	114	48	-	-
18.....	-	-	-	19.1	250	198	208	72	106	48	-	-
19.....	-	-	-	19.1	293	242	193	74	99	48	-	-
20.....	-	-	-	19.5	344	254	177	72	94	46	-	-
21.....	-	-	-	20.0	319	208	165	71	87	46	30e	-
22.....	-	-	-	19.5	328	190	165	69	81e	45	-	-
23.....	-	-	-	18.7	328	182	228	68	61	45	-	-
24.....	-	-	-	19.1	323	170	196	68	75	43	-	-
25.....	-	-	-	18.7	319	163	170	67	74	43	-	-
26.....	-	-	-	18.2	293	156	172	67	72	42	-	-
27.....	-	-	-	17.7	244	156	179	63	71	41	-	-
28.....	-	-	-	17.7	271	265	172	63	71	41	-	-
29.....	-	-	-	18.7	273	267	161	63	69	40.2	-	-
30.....	-	-	-	20.0	302	326	153	62	68	39.4	-	-
31.....	-	-	-	-	246	-	146	62	-	40.2	-	-
Mean	-	-	-	19.1	221	229	242	83.7	79.8	50.8	32.7	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	-	1,140	13,580	13,610	14,880	5,150	4,750	3,120	1,950	-

The Period.....Discharge: Daily - Maximum 1 July, 353
 (244 days) - Minimum 6 and 10 April, 17.3
 Instantaneous Maximum 7:30 p.m., 20 May, 379
 Mean 120.2
 Runoff: Acre-feet 58,180

e - Estimated.

x - Staff gauge reading.

Discharge at this station is affected by the operation of gate immediately upstream during periods of high water.

Source: Ghost River. Location: Lat. 51° 17', long. 115° 10', in NE. 1/4 sec. 2, tp. 27, rge. 9, W. 5th Mer., Alberta, at east end of Minnewanka Lake and about eighteen miles northeast of Banff. Period of Record: August 1941 to December 1947 and January 1949 to date. Average Discharge: (16 years) - 51.6 cfs. Extremes Recorded: Maximum, on 23 May 1948 the discharge was estimated to be in excess of 2,000 cfs. Remarks: Records supplied by Calgary Power Ltd. Water is diverted from Ghost River to Minnewanka Lake by diversion works near Black Rock Mountain and this diversion is recorded at station called "Ghost River Diversion Canal near Black Rock Mountain". Balance of the flow, which is not diverted at this point, is recorded at station called "Ghost River Overflow near Black Rock Mountain". This water passes downstream and is likewise diverted to Minnewanka Lake by diversion works near Devil's Gap. An appreciable proportion of the total river flow is lost throughout the area in gravel beds and probably does not reach the lake. Since October 1950 the data for this station has been derived from the records at the stations near Black Rock Mountain mentioned and from miscellaneous discharge measurements made near Minnewanka Lake in both the river channel and the diversion canal. Prior to that date, data were obtained from station on the diversion canal near Minnewanka Lake.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	Nil	Nil	Nil	Nil	0	241	303	100	40	45	19	Nil
2.....	"	"	"	"	6	273	291	96	39	45	18	"
3.....	"	"	"	"	5	264	273	87	39	44	16	"
4.....	"	"	"	"	9	287	264	86	40	44	16	"
5.....	"	"	"	"	20	270	257	78	40	42	16	"
6.....	"	"	"	"	37	252	300	73	40	39	16	"
7.....	"	"	"	"	63	222	274	70	40	39	14	"
8.....	"	"	"	"	98	200	271	68	40	37	14	"
9.....	"	"	"	"	157	194	216	64	40	34	14	"
10.....	"	"	"	"	188	165	221	59	40	33	13	"
11.....	"	"	"	"	202	143	211	57	39	32	13	"
12.....	"	"	"	"	210	143	215	56	42	32	10	"
13.....	"	"	"	"	158	136	241	54	77e	31	10e	"
14.....	"	"	"	"	188	146	241	53	92	30	10	"
15.....	"	"	"	"	245	148	230	53	93	29	10	"
16.....	"	"	"	"	257	136	202	52	92	28	10	"
17.....	"	"	"	"	218	130	186	50	80	27	10	"
18.....	"	"	"	"	200	158	168	42	74	27	10	"
19.....	"	"	"	"	243	200	153	44	69	27	10	"
20.....	"	"	"	"	297	212	139	42	64	25	9	"
21.....	"	"	"	"	275	168	129	41	58	25	9	"
22.....	"	"	"	"	281	151	129	41	53e	24	9	"
23.....	"	"	"	"	276	143	186	40	35	24	9	"
24.....	"	"	"	Nil	274	132	156	40	52	22	8	"
25.....	"	"	"	"	264	126	132	40	51	22	8	"
26.....	"	"	"	"	243	120	134	40	49	21	0e	"
27.....	"	"	"	"	194	120	139	39	48	20	0	"
28.....	"	"	"	"	221	222	134	39	48	21	Nil	"
29.....	"	-	"	"	223	223	123	39	47	20	"	"
30.....	"	-	"	"	247	276	117	38	46	19	"	"
31.....	"	-	"	-	196	-	111	38	-	20	-	"
Mean	Nil	Nil	Nil	Nil	177	187	198	55.4	53.6	29.9	10.0	Nil
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	Nil	Nil	Nil	Nil	10,900	11,110	12,190	3,410	3,190	1,840	597	Nil

The Year..... Discharge: Daily - Maximum 1 July, 303
 - Minimum at various times, Nil
 Mean 59.7
 Runoff: Acre-feet 43,240

The discharge of the Ghost Diversion to Minnewanka Lake is the combined flow of the Ghost River Diversion Canal near Minnewanka Lake and the Ghost River Overflow near Minnewanka Lake.
 e - Estimated 13 to 22 September and 13 to 26 November.

Location: Lat. 51° 15' 40", long. 114° 45' 50", in SW. 1/4 sec. 34, tp. 26, rge. 6, W. 5th Mer., Alberta, about four miles above confluence with Bow River at Ghost Dam Reservoir. Drainage Area: 346 square miles (revised). Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: August 1911 to October 1920 and December 1928 to date. Prior to 1928 records were collected at site about two miles downstream and published under the title, "at Gillies' Ranch". The recorder was established on 29 June 1916 to replace the former manual gauges. Average Discharge: (37 years) - 240 cfs. Extremes Recorded: Daily - Maximum, 2 June 1932, 10,200 cfs, Minimum, 25 February 1954, 29.1 cfs (discharge measurement under ice conditions); Instantaneous Maximum 2:30 p.m., 2 June 1932, 13,900 cfs. Revisions: March 1945 mean discharge was published in error in W.R.P. 97 and should be 89 cfs. Remarks: Records good during open-water periods and fair during ice period. Since August 1941, discharge has been affected by upstream diversion to Minnewanka Lake.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	193	197	149	121	89	93	90	494	284	620	393	296
2.....	204	186	149	121	88	93	92	441	400	609	370	296
3.....	220	193	148	122	88	93	93	315	408	476	370	302
4.....	204	189	145	122	88	93	94	308	524	424	355	290
5.....	204	189	143	122	87	92	96	341	476	424	341	284
6.....	204	189	140	122	87	88	98	370	362	1,210	341	272
7.....	201	190b	138	122	86	85	100	400	315	1,100	334	267
8.....	201	186	135	122	85	81	104	393	278	939	328	261
9.....	197	180	132	122	85	80	110	362	272	763	328	261
10.....	201	173	130	122	84	79	150	302	284	675	321	261
11.....	208	168	127	122	84	79	200	278	284	664	321	256
12.....	216	163	125	122	84	79	250	272	315	697	315	272
13.....	224	160	122	122	83	79	300b	217	278	840	308	654
14.....	220	157	120	122	83	79	370	213	315	741	302	467
15.....	216	154	117	121	82	78	272	222	341	664	302	362
16.....	201	152	116	121	82	78	241	236	296	653	296	328
17.....	201	149	114	120	82	78	180	222	290	642	296	302
18.....	193	148	113	120	82	77	172	196	408	554	296	290
19.....	189	147	113	118	82	77	176	204	424	514	308	284
20.....	186	146	112	117	82	76	168	241	441	467	315	272
21.....	193	145	112	114	84	76	168	296	377	449	321	267
22.....	182	145	111	112	87	75	144	284	328	441	334	261
23.....	182	146	110	108	89	75	126	278	302	544	308	256
24.....	182	146	110	105	91	76	118	241	284	467	302	261
25.....	182	147	110	102	92	76	113	236	272	441	296	256
26.....	189	147	111	99	93	77	113	217	261	432	302	251
27.....	189	148	112	96	93	79	110	196	261	504	308	246
28.....	189	148	114	93	93	82	110	188	341	554	302	241
29.....	193	148	116	93	-	83	141	192	355	476	302	236
30.....	204	149	118	91	-	86	348	272	467	449	296	236
31.....	204	-	120	90	-	88	-	246	-	416	290	-
Mean	199	163	124	114	86.2	81.6	162	280	341	608	319	293
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	12,240	9,690	7,600	6,990	4,790	5,020	9,610	17,200	20,320	37,390	19,640	17,430

The Year..... Discharge: Daily - Maximum 6 July, 1,210
- Minimum 22 and 23 March, 75
Instantaneous Maximum 1 p.m., 6 July, 1,440
Mean 232
Runoff: Acre-feet 167,900

b - Ice conditions 7 November to 13 April.

Location: Lat. 50° 57', long. 114° 34', in SE. 1/4 sec. 13, tp. 23, rge. 5, W. 5th Mer., Alberta, about one mile below mouth of Bragg Creek and about twenty-five miles upstream from Glenmore Reservoir. Drainage Area: 306 square miles (revised). Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: Gauge heights only during high-water periods 1923 to 1934; part-year daily discharges 1935 to date. Prior to 1949, records were collected from chain gauge about one-half mile upstream and in 1949 from wire-weight gauge near present location. Extremes Recorded: Daily - Maximum, 23 May 1948, 9,270 cfs, Minimum, 27 March 1954, 53 cfs. Remarks: Records excellent during open-water period and fair during ice period. Higher floods than maximum shown probably occurred in 1923 and 1932 but data insufficient to define maximum discharges in those years.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	94 ^b _x	102x	317	790	608	669	307	242	-	-
2.....	-	-	94	102	380	895	623	630	307	237	-	-
3.....	-	-	101	100	350	952	593	593	312	233	-	-
4.....	-	-	71x	112	350	1,180	562	555	302	233	-	-
5.....	-	-	90	108	392	1,170	555	513	297	233	-	-
6.....	-	-	68	100	422	1,030	1,060	499	292	237	-	-
7.....	-	-	88	102	471	962	1,170	485	282	233	-	-
8.....	-	-	92	104	593	879	1,160	464	282	229	-	-
9.....	-	-	109	110	774	808	1,040	443	277	225	-	-
10.....	-	-	112	108	808	834	962	422	272	217	-	-
11.....	-	-	101	114	782	765	972	410	267	213	-	-
12.....	-	-	98	134	905	723	1,170	416	272	213	-	-
13.....	-	-	90	213	816	669	1,340	392	374	213	-	-
14.....	-	-	78x	292	715	684	1,270	374	332	213	-	-
15.....	-	-	70	267	723	723	1,150	362	312	209	-	-
16.....	-	-	63	229	852	653	1,060	344	307	209	-	-
17.....	-	-	66	205	852	646	1,000	338	297	205	-	-
18.....	-	-	63	201	740	692	905	332	292	205	-	-
19.....	-	-	73	193	756	799	843	368	287	209	-	-
20.....	-	-	71	193	878	843	774	392	292	205	-	-
21.....	-	-	86	193	1,020	748	700	344	282	205	-	-
22.....	-	-	84	158	924	708	708	344	282	201	-	-
23.....	-	-	103b	140	962	676	1,040	332	277	197	-	-
24.....	-	-	106	132	924	653	825	322	267	193	-	-
25.....	-	-	106	130	972	608	731	317	262	189	-	-
26.....	-	-	106	126	905	600	765	307	257	185	-	-
27.....	-	-	102	126	816	600	765	307	252	185	-	-
28.....	-	-	102	124	765	692	723	338	252	185	-	-
29.....	-	-	102	146	782	616	860	322	252	185	-	-
30.....	-	-	102	229	852	593	816	307	247	185	-	-
31.....	-	-	102	-	782	-	723	302	-	185	-	-
Mean	-	-	90.1	153	728	773	886	405	286	210	-	-
Per sq. mi.	-	-	0.29	0.50	2.38	2.53	2.90	1.32	0.93	0.69	-	-
Acre-feet	-	-	5,540	9,110	44,790	46,000	54,490	24,880	17,040	12,910	-	-

The Period.....Discharge: Daily - Maximum 13 July, 1,340
 (245 days) - Minimum 16 and 18 March, 63
 Instantaneous Maximum 5 a.m., 13 July, 1,420
 Mean 442; Per Square Mile 1.44
 Runoff: Acre-feet 214,800; Depth in inches on drainage area 13.16

b - Ice conditions 1 to 23 March.

x - Staff gauge readings 1 to 4 March and 14 March to 1 April.

ELBOW RIVER ABOVE GLENMORE DAM - STATION No. 5BJ5

Location: Lat. 51° 00', long. 114° 06', in SE. 1/4 sec. 32, tp. 23, rge. 1, W. 5th Mer., Alberta, above the Glenmore Dam in Calgary. **Drainage Area:** 471 square miles (revised). **Period of Record:** June 1933 to date. **Average Discharge:** (25 years) - 339 cfs. **Extremes Recorded:** Daily - Maximum, 31 August 1951, 4,845 cfs, Minimum, 5 December 1956, 7 cfs; **Instantaneous Maximum** - 11:30 p.m., 2 June 1932, 25,200 cfs. This maximum was recorded at the time the dam was being constructed, **Revisions:** May 1948 mean discharge has been corrected to 1,564 cfs. **Remarks:** Data supplied by the Waterworks Department, City of Calgary. Records for period June to September 1933 were not published.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	202	241	157	77	117	109	174	400	865	693	886	370
2.....	207	232	164	91	126	102	219	524	907	726	783	318
3.....	244	191	155	84	106	120	205	558	936	702	740	321
4.....	243	224	153	103	91	84	235	553	1,070	661	662	307
5.....	234	218	158	113	91	103	352	605	1,230	642	663	302
6.....	207	225	137	121	72	100	446	614	1,130	941	561	287
7.....	228	250	138	96	72	102	493	617	964	1,570	562	300
8.....	210	230	173	135	71	110	678	707	867	1,490	522	245
9.....	229	226	156	115	70	123	863	874	855	1,560	524	253
10.....	207	230	133	119	85	125	625	972	909	1,410	528	280
11.....	232	226	125	114	79	115	764	1,040	871	1,350	529	264
12.....	221	216	173	128	88	112	873	1,060	814	1,550	451	276
13.....	211	199	144	112	82	110	1,070	979	761	1,860	485	564
14.....	236	206	154	78	55	85	935	1,200	722	1,940	456	485
15.....	236	195	118	94	64	81	565	831	1,070	1,720	414	418
16.....	223	194	106	123	70	70	628	1,040	520	1,440	382	402
17.....	209	171	180	134	64	75	600	955	715	1,300	357	383
18.....	209	182	146	136	74	74	565	888	736	1,120	333	307
19.....	209	180	131	113	74	90	479	839	792	1,000	331	300
20.....	208	199	114	98	87	84	472	891	930	893	364	290
21.....	240	125	126	112	110	102	472	1,050	840	856	316	279
22.....	206	222	108	129	126	101	459	795	773	745	357	268
23.....	195	194	101	108	160	118	274	948	613	1,040	318	264
24.....	191	200	122	125	155	114	240	1,030	725	843	317	254
25.....	211	201	118	138	149	117	250	1,040	691	940	298	250
26.....	212	208	108	116	124	123	197	1,010	645	974	279	242
27.....	208	196	110	107	120	115	189	922	514	992	286	246
28.....	193	147	95	115	104	73	183	928	760	972	392	233
29.....	201	147	100	123	-	130	186	886	751	1,020	382	232
30.....	218	170	78	106	-	173	287	916	747	1,070	409	238
31.....	235	-	72	107	-	144	-	886	-	997	384	-
Mean	217	202	131	112	95.9	106	466	857	824	1,130	460	306
Per sq. mi.	0.46	0.43	0.28	0.24	0.20	0.23	0.99	1.82	1.75	2.40	0.98	0.65
Acre-feet	13,320	11,990	8,040	6,880	5,330	6,510	27,720	52,680	49,040	69,460	28,310	18,200

The Year.....Discharge: Daily - Maximum 14 July, 1,940

- Minimum 14 February, 55

Mean 411; Per Square Mile 0.87

Runoff: Acre-feet 297,500; Depth in inches on drainage area 11.84

Location: Lat. 51° 00', long. 114° 06', in SE. 1/4 sec. 32, tp. 23, rge. 1, W. 5th Mer., Alberta, below Glenmore Dam in Calgary. Drainage Area: 471 square miles. Period of Record: Part-year records 1908, 1909 and 1933; continuous April 1910 to October 1932 and October 1933 to date. Prior to October 1933 records were collected in SW. 1/4 sec. 14, tp. 24 about one-half mile above confluence with Bow River and published under the title "at Calgary". Average Discharge: (47 years) - 341 cfs. Extremes Recorded: Daily - Maximum, 3 June 1929, 13,500 cfs, Minimum (Regulated), 11 April 1957, 12 cfs; Instantaneous Maximum - 1 p.m., 3 June 1929, 15,300 cfs. Revisions: February and July 1917 mean discharges have been corrected to 173 and 659 cfs; runoff for February and July 1917 and for the water year 1916-17 have been corrected to 9,608, 40,520 and 383,737 acre-feet. Remarks: Records from October 1933 supplied by the Waterworks Department, City of Calgary. Records affected by regulation at Glenmore Dam and diversion for City of Calgary domestic water supply since June 1933.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	196	145	130	143	92	147	119	170	934	582	889	434
2.....	171	134	147	135	84	144	149	187	955	599	747	248
3.....	134	136	139	137	107	148	146	376	962	611	718	144
4.....	141	150	150	140	151	159	139	519	964	613	648	198
5.....	138	163	150	132	139	160	138	523	965	606	599	232
6.....	132	136	145	139	140	101	137	529	543	597	443	211
7.....	137	227	142	138	106	78	152	523	1,320	830	460	234
8.....	138	244	126	125	71	75	144	514	1,300	1,100	460	201
9.....	138	222	164	80	72	73	145	644	865	1,460	472	199
10.....	140	217	178	74	76	78	151	794	812	1,450	492	227
11.....	151	218	176	71	111	83	471	903	944	1,320	490	227
12.....	135	209	153	71	101	76	756	983	769	1,370	372	204
13.....	136	172	135	72	77	77	872	1,080	641	1,690	431	268
14.....	127	143	142	77	77	77	1,180	1,270	665	1,950	441	405
15.....	138	147	131	72	78	77	1,580	927	657	1,790	381	422
16.....	144	138	126	73	78	73	1,140	702	704	1,550	283	415
17.....	141	132	110	74	77	81	591	704	713	1,350	275	426
18.....	146	140	129	72	77	77	588	699	708	1,190	250	239
19.....	133	139	164	67	82	80	493	685	666	1,070	218	173
20.....	133	146	166	75	82	76	464	628	713	984	202	170
21.....	137	149	130	72	79	77	454	508	703	966	212	164
22.....	138	147	127	73	77	77	419	908	708	660	192	157
23.....	138	130	155	73	72	72	368	1,260	510	511	178	155
24.....	143	119	144	71	80	80	295	957	508	610	208	152
25.....	150	95	127	68	126	76	234	894	509	904	222	162
26.....	147	148	131	69	149	75	161	884	509	891	209	154
27.....	132	176	132	71	146	76	157	934	293	927	162	161
28.....	156	157	139	74	147	95	166	888	402	962	321	158
29.....	178	149	131	79	-	82	175	747	807	933	429	158
30.....	169	151	144	98	-	76	174	444	704	1,030	430	162
31.....	141	-	132	98	-	81	-	944	-	1,020	411	-
Mean	144	159	142	90.7	98.4	90.5	405	733	748	1,036	395	229
Per sq. mi.	0.31	0.34	0.30	0.19	0.21	0.19	0.86	1.56	1.59	2.20	0.84	0.49
Acre-feet	8,880	9,480	8,720	5,580	5,460	5,570	24,120	45,080	44,530	63,720	24,290	13,610

The Year.....Discharge: Daily - Maximum 14 July, 1,950
- Minimum 19 January, 67

Mean 358; Per Square Mile 0.76

Runoff: Acre-feet 259,000; Depth in inches on drainage area 10.31

Location: Lat. 50° 53' 15", long. 114° 19' 30" (corrected), in NW. 1/4 sec. 23, tp. 22, rge. 3, W. 5th Mer., Alberta, at highway bridge below junction with Priddis Creek. Drainage Area: 103 square miles. Gauge: Wire-weight. Measurement of Discharge: From bridge or by wading. Period of Record: Part-year records 1908 to 1916; continuous March 1956 to date; miscellaneous measurements in 1907. Prior to 1956, records were obtained from staff gauge in SW. 1/4 sec. 26. Extremes Recorded: Daily - Maximum, 26 June 1915, 7,020 cfs (estimated), Minimum, 13 February 1957, 0.1 cfs (discharge measurement under ice conditions). Revisions: 1915 and 1916 revised data may be obtained upon application to the District Engineer at Calgary, for address see page 8. Remarks: Records good during open-water periods and fair during ice periods.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	4.4	15	9	15	1	2	1	244	101	42.4	27.3	11.0
2.....	6.6e	15	11	11	1	2	1	279	88e	49.7e	22.9	10.6
3.....	8.8e	16	9	6	1	1	1	186	76	57	19.1	15.9
4.....	11b	16	8	10	1	1	6	148	68e	46.0	17.1	14.2
5.....	11	17	8	14	1	1	12	220e	59	67e	14.7	12.5
6.....	11	15	9	17	0	1	83	291	47.3	88	14.1	11.0
7.....	10	17	7	21	1	1	97	97	40.0	206	14.4e	9.7
8.....	10	20	7	20	1	1	40	114	36.7e	116	14.7	8.4
9.....	10	22	9	20	2	1	31	99	33.3	85	12.8e	8.0e
10.....	12	20	9	19	0	1	73	86	38.8	62	11.0	7.5
11.....	15	18	9	18	0	1	133	76	44.9e	76	10.6	6.7
12.....	20	18	8	4	1	1	458	76	51	123	10.1	5.1
13.....	18	18	8	8	3	1	476	67	38.8	323	10.1	64
14.....	18	17	7	6	4	1	428	58	35.5	168	10.1	43.6
15.....	19	16	5	3	4	1	438	51	121	126e	7.5	30.7e
16.....	18	16	4	9	4	1	482	47.3e	84e	85	7.3e	17.8
17.....	16	13	5	15	4	1	342	43.6	46.0	70e	7.1	14.9e
18.....	14	12	6	21	4	1	333	40.0	109	54	5.9	12.0
19.....	12	13	3	14	4	1	251	36.6	97e	55	7.4e	10.6
20.....	19	13	6	7	4	1	165	35.5	85	40.0	8.8	11.0
21.....	26	12	10	7	4	1	133b	35.5	76	35.5	11.2e	10.6e
22.....	24	12	7	6	4	1	99	32.2	65	91e	13.6	10.1
23.....	21	28	4	6	4	0	67	30.2	53e	146	12.1e	10.1
24.....	20	27	6	12	4	0	51	28.2	41.2	64	10.6	10.6e
25.....	18	30	8	7	4	0	46.0	26.0e	36.7e	53e	8.0	10.2
26.....	18	33	20	4	3	0	40.0	23.7	32.2	42.4	10.0e	9.7
27.....	18	26	12	5	2	0	62	22.9	27.3	43.6e	12.0	9.3
28.....	18	20	12	1	1	0	48.6	21.3	36.6	44.8	17.1	8.8
29.....	17	13	26	5	-	0	61	22.1	44.8	59	17.1	8.8
30.....	22	11	2	6	-	1	183	171	44.8	54	14.1	9.2e
31.....	29	-	2	4	-	1	-	99	-	33.3	12.0	-
Mean	16.0	18.0	8.26	10.4	2.39	0.84	155	90.6	58.6	84.1	12.6	14.1
Per sq. mi.	0.15	0.17	0.08	0.10	0.02	0.01	1.50	0.88	0.57	0.82	0.12	0.14
Acre-feet	981	1,070	508	637	133	52	9,210	5,570	3,490	5,170	775	838

The Year.....Discharge: Daily - Maximum 16 April, 482
 - Minimum at various times, 0
 Mean 39.3; Per Square Mile 0.38
 Runoff: Acre-feet 28,430; Depth in inches on drainage area 5.17

b - Ice conditions 4 October to 21 April.

e - Estimated.

Location: Lat. 50° 24' 40", long. 114° 28' 30", (corrected), in SW. 1/4 sec. 10, tp. 17, rge. 4, W. 5th Mer., Alberta, one mile east of Forest Reserve Boundary. Drainage Area: 300 square miles (revised). Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: Part-year records 1950 to date. Extremes Recorded: Daily - Maximum, 9 June 1953, 7,670 cfs (revised), Minimum, various times in March 1957, 18 cfs; Instantaneous Maximum - 1 a.m., 9 June 1953, 10,000 cfs (revised). Revisions: Mean daily discharges for 8 and 9 June 1953 have been revised to 7,570 and 7,670 cfs respectively. Other consequent revisions for June 1953 are as follows: maximum, 7,670; mean 3,074; per square mile, 10.42; depth in inches on drainage area, 11.63; runoff in acre-feet 182,900. Other revisions for the period in 1953 are as follows: maximum, 7,670; mean 688; depth in inches on drainage area, 21.25; runoff in acre-feet, 334,300. Remarks: Records excellent during open-water period and fair during ice periods.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	34b	59	149	1,030	524	446	191	136	-	-
2.....	-	-	36x	66	244	1,060	530	421	199	130	-	-
3.....	-	-	36	69	321	1,040	512	406	199	130	-	-
4.....	-	-	36	75	364	1,050	495	382	191	128	-	-
5.....	-	-	36x	76	406	1,000	500	359	180	128	-	-
6.....	-	-	38	77b	462	961	825	346	172	128	-	-
7.....	-	-	41x	76	489	920	961	333	166	126	-	-
8.....	-	-	40	75	663	856	969	321	164	128	-	-
9.....	-	-	38x	76	848	840	888	308	159	119	-	-
10.....	-	-	39	75	936	945	794	296	159	117	-	-
11.....	-	-	40x	77	1,000	856	748	292	156	117	-	-
12.....	-	-	41	83	1,290	794	802	292	156	117	-	-
13.....	-	-	43	102	1,220	734	994	269	180	117	-	-
14.....	-	-	45x	126	1,090	712	961	258	177	115	-	-
15.....	-	-	46	112	1,120	670	896	244	169	114	-	-
16.....	-	-	46	104	1,310	622	872	238	164	114	-	-
17.....	-	-	47	100	1,330	597	896	228	156	110	-	-
18.....	-	-	48	100	1,230	603	802	224	154	110	-	-
19.....	-	-	48	96	1,230	636	741	221	164	115	-	-
20.....	-	-	49x	95	1,360	649	676	224	177	115	-	-
21.....	-	-	49	96	1,560	603	616	215	164	108	-	-
22.....	-	-	49	98	1,540	565	603	208	164	108	-	-
23.....	-	-	49	95	1,560	547	719	205	159	108	-	-
24.....	-	-	49x	93	1,550	524	622	196	154	102	-	-
25.....	-	-	52	94	1,560	489	572	191	152	96	-	-
26.....	-	-	56x	93	1,460	478	578	185	149	94	-	-
27.....	-	-	57	90	1,340	495	530	202	143	94	-	-
28.....	-	-	57	89	1,250	616	512	224	143	94	-	-
29.....	-	-	58	90	1,250	553	547	205	143	94	-	-
30.....	-	-	58	101	1,180	518	530	196	141	94	-	-
31.....	-	-	59	-	1,080	-	473	185	-	91	-	-
Mean	-	-	45.8	88.6	1,045	732	700	268	165	113	-	-
Per sq. mi.	-	-	0.15	0.30	3.48	2.44	2.33	0.89	0.55	0.38	-	-
Acre-feet	-	-	2,820	5,270	64,250	43,560	43,020	16,500	9,810	6,940	-	-

The Period.....Discharge: Daily - Maximum 21, 23 and 25 May, 1,560
 (245 days) - Minimum 1 March, 34
 Instantaneous Maximum 1 a.m., 23 May, 1,690
 Mean 395; Per Square Mile 1.32
 Runoff: Acre-feet 192,200; Depth in inches on drainage area 12.01

b - Ice conditions 1 March to 6 April.

x - Staff gauge readings.

Location: Lat. 50° 42' 00", long. 113° 51' 10", in NW. 1/4 sec. 17, tp. 20, rge. 28, W. 4th Mer., Alberta, three miles above confluence with Sheep River and about ten miles above confluence with Bow River. Drainage Area: 906 square miles (revised). Gauge: Wire-weight. Measurement of Discharge: From cableway or by wading. Period of Record: Miscellaneous measurements and gauge heights in 1911; daily discharges for periods of varying length 1912 to date. Average Discharge: (15 years) - 548 cfs. Extremes Recorded: Daily - Maximum, 12 May 1942, 15,820 cfs, Minimum, 20 February 1918 and 1 and 2 March 1936, 10 cfs. Instantaneous Maximum - 2 a.m., 12 May, 1942, 25,010 cfs. Revisions: 1918, W.R.P. 117; 22 to 31 October 1957 daily discharges and the October monthly summary were revised and these data are included in this paper; runoff for March to October 1957 has been corrected to 237,100 acre-feet. Remarks: Records good during open-water periods and fair during ice period. A higher discharge than the 1942 extreme is believed to have occurred during a flood in 1932. Maximum gauge height was reported to have been 13.4 feet on 2 June 1932 at an estimated discharge of 26,000 cfs. A relatively small flow is diverted annually to Little Bow Irrigation District Canal above this station.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	139	222	46	42	40	63	214	940	1,500e	979	798	273
2.....	136	151	58	43	43	73	379	1,120	1,470	979	743	278e
3.....	138e	159	81	45	39	83	281	992	1,480	953	690	283e
4.....	140e	180	120	49	47	95	263	1,000e	1,410	966e	620	288
5.....	142	181	141	58	61	81	357	1,020e	1,560	979	558	288
6.....	144e	191	101	58	62	53	616	1,030	1,400	953	558	239
7.....	145	146	98	65	48	81	874	1,100	1,320e	2,580	516	232e
8.....	145	109	109	74	37	91	1,010	1,370	1,250e	2,150	501	224
9.....	133	85	152	71	19	92	948	1,700	1,170	1,800	494	224
10.....	151	149	110	64	40	93	885	1,700	1,280	1,490	437	220
11.....	145	166	91	56	44	75	1,100	1,790e	1,240	1,260	425	216
12.....	151	202	97	67	46	67	1,620	1,880	1,170e	1,500e	425	211
13.....	158	100	102	67	50	75	2,290	2,170	1,100	1,740e	437	263
14.....	166e	105	89	56	59	38	2,500b	1,770	1,100e	1,980	418	266e
15.....	174	122	88	60	54	73	1,540	1,640	1,100	1,740	381	268
16.....	174	97	77	57	54	40	1,260	1,880	1,020e	1,380	358	244
17.....	166	85	82	64	56	49	743	1,840	940	1,410e	353	224
18.....	162	80	91	72	55	40	601	1,730e	966	1,440	325	216
19.....	162	107	81	57	58	47	494	1,620	1,070	1,270	320	202
20.....	158	116	77	61	58	65	425	2,150	1,190	1,150	314	213e
21.....	170	103	50	47	62	53	393	2,120e	1,120e	1,000	314	224
22.....	182b	102	70	52	92	65	412	2,100	1,040e	953	309	206
23.....	154	130	67	70	84	71	325	2,170	966	1,060e	309	216
24.....	116	154	60	50	82	46	299	2,090	904	1,160	304	216
25.....	118	149	51	65	105	60	294	2,180	846e	966	299	202
26.....	153	139	52	76	83	73	281e	1,960	787	928	299	206
27.....	170	149	55	71	91	83	268	1,800	822e	892	299	202e
28.....	142	117	57	61	77	87	273	1,640	857e	880	299e	198
29.....	150	86	56	64	-	190	258	2,180	893e	868	299	188
30.....	175	76	55	69	-	192	479	1,560	928	966	294	184
31.....	212	-	49	54	-	194	-	1,530e	-	953	288	-
Mean	154	132	81.1	60.2	58.4	80.3	723	1,670	1,130e	1,269	419	230
Per sq. mi.	0.17	0.15	0.09	0.07	0.06	0.09	0.80	1.84	1.25	1.40	0.46	0.25
Acre-feet	9,460	7,850	4,980	3,700	3,240	4,930	43,010	102,700	67,240	78,000	25,750	13,710

The Year.....Discharge: Daily - Maximum 7 July, 2,580
- Minimum 9 February, 19
Mean 504; Per Square Mile 0.56
Runoff: Acre-feet 364,600; Depth in inches on drainage area 7.55

b - Ice conditions 22 October to 14 April. e - Estimated.
Gauge heights from graph of observed readings 22 October to 25 February.

Location: Lat. 50° 37' 20", long. 114° 25' 40", in sec. 24, tp. 19, rge. 4, W. 5th Mer., Alberta, about eight miles southwest of Turner Valley, and one mile east of boundary of Provincial Forest Reserve. Drainage Area: 176 square miles (revised). Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: Part-year records 1950 to date. Extremes Recorded: Daily - Maximum, 9 June 1953, 2,870 cfs, Minimum, 11 March 1954, 10 cfs; Instantaneous Maximum - 5 a.m., 6 July 1951, 3,740 cfs. Remarks: Records excellent during open-water period and fair during ice period.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	b	56	542	498	410	558	134	92	-	-
2.....	-	-		183	475	605	461	512	134	90	-	-
3.....	-	-	30e	106	439	629	446	461	137	88	-	-
4.....	-	-		111	439	799	432	432	131	86	-	-
5.....	-	-		122	468	799	439	383	123	86	-	-
6.....	-	-	31x	98	468	687	1,300	310	120	86	-	-
7.....	-	-		111	566	605	1,330	258	117	84	-	-
8.....	-	-		418	721	520	1,080	240	115	84	-	-
9.....	-	-		796	773	498	873	223	112	79	-	-
10.....	-	-		567	729	535	721	204	109	81	-	-
11.....	-	-	20e	660	764	453	679	204	106	79	-	-
12.....	-	-		1,050	1,020	439	747	219	106	79	-	-
13.....	-	-		1,440	773	403	970	189	149	77	-	-
14.....	-	-		1,230	637	446	921	182	137	77	-	-
15.....	-	-		943	662	475	808	168	128	75	-	-
16.....	-	-	35e	718	782	446	721	165	123	75	-	-
17.....	-	-		575	721	432	712	158	117	75	-	-
18.....	-	-		523	613	446	613	152	112	73	-	-
19.....	-	-		425	613	558	558	168	115	75	-	-
20.....	-	-		453	747	621	498	165	112	77	-	-
21.....	-	-	380b	392	818	558	468	152	106	75	-	-
22.....	-	-		253	782	505	482	152	109	73	-	-
23.....	-	-		225	782	490	738	146	106	73	-	-
24.....	-	-		175	738	446	605	137	104	68	-	-
25.....	-	-		179	729	403	528	134	101	66	-	-
26.....	-	-	380b	199	654	368	550	128	97	75	-	-
27.....	-	-		143	590	389	520	137	97	77	-	-
28.....	-	-		191	558	498	535	146	95	84	-	-
29.....	-	-		273	566	425	721	137	95	79	-	-
30.....	-	-		380b	535	396	721	128	95	68	-	-
31.....	-	-		-	475	-	637	123	-	68e	-	-
Mean	-	-	28.6e	433	651	512	685	222	115	78.2	-	-
Per sq. mi.	-	-	0.16	2.46	3.70	2.91	3.89	1.26	0.65	0.44	-	-
Acre-feet	-	-	1,760	25,780	40,020	30,490	42,100	13,630	6,830	4,810	-	-

The Period.....Discharge: Daily - Maximum 13 April, 1,440
 (245 days) Instantaneous Maximum 8 p.m., 13 April, 1,850
 Mean 340; Per Square Mile 1.93
 Runoff: Acre-feet 165,400; Depth in inches on drainage area 17.62

b - Ice conditions 1 March to 30 April.

e - Estimated.

x - Staff gauge reading.

SHEEP RIVER NEAR ALDERSYDE - STATION No. 5BL20

Location: Lat. 50° 42' 45", long. 113° 52' 50", in NW. 1/4 sec. 19, tp. 20, rge. 28, W. 4th Mer., Alberta, at highway bridge about three miles above confluence with Highwood River. Drainage Area: 660 square miles. Gauge: Wire-weight. Measurement of Discharge: From cableway or by wading. Period of Record: September 1957 to date. Extremes Recorded: Daily - Maximum, 14 April 1958, 2,460 cfs, Minimum, 8 February 1958, 16 cfs. Remarks: Records good during open-water periods and fair during ice period. Records for September 1957 are published in this report.

Daily Discharge in Cubic Feet per Second for Water Year 1956-57

Day	September	Day	September	Day	September
1.....	120e	11.....	107	21.....	123
2.....	120e	12.....	105	22.....	135
3.....	120e	13.....	115	23.....	142
4.....	151	14.....	117	24.....	137
5.....	170	15.....	119	25.....	137
6.....	139	16.....	114	26.....	129
7.....	137	17.....	125	27.....	133
8.....	131	18.....	131	28.....	123
9.....	121	19.....	137	29.....	112
10.....	117	20.....	133	30.....	105

The Period.....Discharge: Daily - Maximum 5 September, 170
 (30 days) - Minimum 12 September, 105

Mean 127; Per Square Mile 0.19

Runoff: Acre-feet 7,550; Depth in inches on drainage area 0.21

e - Estimated.

Daily Discharge in Second-feet for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	103	157	48	33	31	54	173	899	637	486	559	148
2.....	100	132	50	32	34	54	377	947	839	559	491	155
3.....	105	116	56	45	42	42	330	800	852	511	447	170
4.....	108	115	62	35	26	39	275	879	983	491	394	160
5.....	107	131	62	35	25	56	433	913	1,200	471	381	153
6.....	110	137	49	39	23	29	476	750	1,060	1,140	330	148
7.....	105	130	36	40	19	27	390	846	885	1,350	330	146
8.....	105	95	41	45	16	32	424	1,000	820	1,420	295	129
9.....	100	85	50	45	23	31	820b	1,220	782e	1,230	262	129
10.....	100	109	50	40	18	41	983	1,140	744	885	262	121
11.....	102	106	53	39	19	30	1,000	1,230	672	1,020	235	121
12.....	105	98	54	30	20	30	1,330	1,200	655	1,180	285	117
13.....	112	85	65	40	19	21	1,700	1,170	548	1,910	259	155
14.....	117	90	60	31	20	37	2,460	885	614	1,510	204	188
15.....	131	95	30	34	19	27	1,320	976	738	1,260	221	167e
16.....	125	83	28	35	20	25	1,340	955	678	926	207	146
17.....	121	67	40	35	23	20	708	933	586	1,010	188	142
18.....	119	57	37	31	26	22	1,060	865	637	781	175	135
19.....	117	72	28	40	26	25	632	794	794	626	180	129
20.....	105	72	33	35	24	34	708	858	1,080	581	232	131
21.....	76e	52	29	30	19	39	678	998	926	522	207	127
22.....	46b	70	25	26	25	49	420	858	839	543	196	123
23.....	77	111	24	31	46	49	330	919	738	955	190	123
24.....	102	92	31	33	67	51	282	872	609	690	175	117
25.....	112	85	35	24	70	54	259	933	553	553	165	117
26.....	135	90	48	31	58	56	247	814e	516	603	163	115
27.....	142	64	51	30	46	56	229	696	471	548	160	108
28.....	133	60	30	32	54	66	238	678	491e	538	185	107
29.....	133	46	29	36	-	81	316	609	511	726	175	105
30.....	134	55	40	41	-	125	538	702	501	781	165	105
31.....	161	-	29	42	-	92	-	620	-	649	160	-
Mean	111	91.9	42.0	35.3	30.6	45.0	683	902	732	853	254	135
Per sq. mi.	0.17	0.14	0.06	0.05	0.05	0.07	1.03	1.37	1.11	1.29	0.38	0.20
Acre-feet	6,840	5,770	2,580	2,170	1,700	2,760	40,610	55,460	43,560	52,470	15,630	8,010

The Year.....Discharge: Daily - Maximum 14 April, 2,460

- Minimum 8 February, 16

Mean 328; Per Square Mile 0.50

Runoff: Acre-feet 237,600; Depth in inches on drainage area 6.74

b - Ice conditions 22 October to 9 April.

e - Estimated.

Gauge heights from graph of observed readings 22 October to 21 January and 4 to 23 February.

Location: Lat. 50° 25' 50", long. 114° 09' 50", in SE. 1/4 sec. 14, tp. 17, rge. 2, W. 5th Mer., Alberta, one-quarter mile west of Pekisko P.O., two and one-half miles above confluence with Pekisko Creek. Drainage Area: 96 square miles (revised). Gauge: Tape-weight. Measurement of Discharge: From bridge or by wading. Period of Record: Mainly March to October, 1911 to 1919 and 1938 to date. Records from 30 June 1912 to 4 April 1916 were obtained about two miles upstream from present site. Extremes Recorded: Daily - Maximum, 11 May 1942, 3,370 cfs, Minimum, Nil at various times. Revisions: Drainage area, 1917 Report; 1948, W.R.P. 117. Remarks: Records good during open-water period and fair during ice period.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	2b	20	226	45.8	70	34.2	4.7	2.2	-	-
2.....	-	-	2	44	239	79	73	31.2	4.2	2.1	-	-
3.....	-	-	2	85	194	63	46.9	25.7	7.0	2.4	-	-
4.....	-	-	2	4	157	59	81	22.3	14.8	1.9	-	-
5.....	-	-	2	7	129	67	223	19.1	11.5	1.6	-	-
6.....	-	-	2	10	102	40.3	242	19.1	5.7	1.8	-	-
7.....	-	-	1	26	102	35.2	223	16.9	4.0	1.6	-	-
8.....	-	-	1	40	102	30.2	210	14.8	3.8	1.6	-	-
9.....	-	-	1	50	108	23.1	132	13.4	3.6	1.8	-	-
10.....	-	-	1	70	81	28.4	81	13.4	2.8	1.6	-	-
11.....	-	-	1	103	70	52	73	12.1	2.4	1.9	-	-
12.....	-	-	1	437	62	46.9	100	10.3	3.2	2.2	-	-
13.....	-	-	1	467	126	44.7	207	7.5	3.6	2.6	-	-
14.....	-	-	1	312	72	45.8	191	8.5	4.7	3.2	-	-
15.....	-	-	1	103b	58	46.9	185	6.5	5.7	3.0	-	-
16.....	-	-	1	126	55	40.3	160	5.7	6.1	2.4	-	-
17.....	-	-	1	73	54	28.4	105	5.0	4.4	2.1	-	-
18.....	-	-	1	59	53	105	88	5.0	4.0	2.2	-	-
19.....	-	-	0	43.6	53	121	77	4.4	3.4	2.2	-	-
20.....	-	-	0	39.2	39.2	160	62	4.4	3.0	2.6	-	-
21.....	-	-	1	45.8	38.2	146	50	4.7	2.6	2.1	-	-
22.....	-	-	0	29.3	37.2	55	63	7.5	2.4	3.0	-	-
23.....	-	-	0	24.8	34.2	48.0	81	8.0	3.0	3.8	-	-
24.....	-	-	0	27.5	32.2	39.2	63	7.5	2.6	4.2	-	-
25.....	-	-	1	36.2	31.2	28.4	50	8.0	2.4	3.6	-	-
26.....	-	-	6	35.2	26.6	29.3	41.4	6.5	2.1	3.6	-	-
27.....	-	-	20	26.6	21.5	28.4	39.2	5.0	1.5	4.2	-	-
28.....	-	-	10	28.4	19.1	34.2	41.4	4.7	1.5	3.8	-	-
29.....	-	-	10	40.3	21.5	40.3	70	11.5	1.6	3.0	-	-
30.....	-	-	11	115	26.6	43.6	105	9.1	2.1	3.2	-	-
31.....	-	-	4	-	31.2	-	88	7.5	-	3.2	-	-
Mean	-	-	2.81	84.3	77.5	55.1	107	11.6	4.15	2.60	-	-
Per sq. mi.	-	-	0.03	0.88	0.81	0.57	1.11	0.12	0.04	0.03	-	-
Acre-feet	-	-	173	5,010	4,760	3,280	6,590	713	247	160	-	-

The Period..... Discharge: Daily - Maximum 13 April, 467

(245 days) - Minimum in March, 0

Mean 43.1; Per Square Mile 0.45

Runoff. Acre-feet 20,930; Depth in inches on drainage area 4.09

b - Ice conditions 1 March to 15 April.

Location: Lat. 50° 50' 05", long. 113° 34' 20", on northern boundary of sec. 32, tp. 21, rge. 26, W. 4th Mer., Alberta, about two miles above confluence with Bow River and five miles southwest of Carseland. Gauge: Staff. Measurement of Discharge: From bridge or by wading. Period of Record: Mainly March to October, 1951 to date. Extremes Recorded: Daily - Maximum, 10 October 1953, 216 cfs, Minimum, at various times in 1958, 0.1 cfs. It is believed that a lower discharge occurred on 25 and 26 May 1954. Remarks: Records good. Discharge is mainly return flow from Western Irrigation District.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	-	4.9	39.6	71	0.1	28.1	57	-	-
2.....	-	-	-	-	0.2	37.6	135	17.6	27.4	58	-	-
3.....	-	-	-	-	0.2	32.1	104	17.6	27.4	58	-	-
4.....	-	-	-	-	0.1	24.6	73	4.1	27.4	59	-	-
5.....	-	-	-	-	0.1	26.0	71	6.3	28.1	59	-	-
6.....	-	-	-	-	0.2	27.4	67	2.6	28.1	59	-	-
7.....	-	-	-	-	0.2	23.3	68	2.6	27.4	1.7	-	-
8.....	-	-	-	-	0.2	26.0	67	1.5	27.4	0.9	-	-
9.....	-	-	-	-	1.9	26.0	28.9	1.5	28.1	1.7	-	-
10.....	-	-	-	-	1.9	15.6	22.1	1.5	26.7	51	-	-
11.....	-	-	-	-	2.6e	15.6	28.9	2.6	28.9	47.1	-	-
12.....	-	-	-	-	3.2	32.1	28.9	2.6	29.7	47.1	-	-
13.....	-	-	-	-	55	33.9	48.2	1.5	73	46.0	-	-
14.....	-	-	-	-	68	33.9	37.6	1.5	73	46.0	-	-
15.....	-	-	-	-	46.0	55	29.7	2.0	71	44.9	-	-
16.....	-	-	-	-	30.5	55	38.6	2.3	71	29.7	-	-
17.....	-	-	-	-	1.1	53	24.0	2.2	73	26.7	-	-
18.....	-	-	-	-	1.1	52	22.7	2.3	67	23.3	-	-
19.....	-	-	-	-	5.1	52	20.4	0.6	64	23.3	-	-
20.....	-	-	-	-	96	44.9	17.1	0.5	62	22.7	-	-
21.....	-	-	-	-	99	44.9	20.4	0.5	62	18.7	-	-
22.....	-	-	-	-	3.1	43.8	19.3	0.6	62	18.7	-	-
23.....	-	-	-	-	49.4	42.7	19.3	0.6	62	18.7	-	-
24.....	-	-	-	-	47.1	8.1	2.5	3.4	61	18.7	-	-
25.....	-	-	-	-	43.8	2.2	3.2	3.5	59	18.7	-	-
26.....	-	-	-	-	4.9	2.2	3.1	3.5	61	18.7	-	-
27.....	-	-	-	-	15.2	2.2	3.2	3.7	59	18.7	-	-
28.....	-	-	-	-	42.7	59	0.2	3.7	59	13.8	-	-
29.....	-	-	-	-	42.7	64	0.1	3.4	58	13.8	-	-
30.....	-	-	-	-	40.6	67	0.1	3.5	58	13.8	-	-
31.....	-	-	-	-	40.1e	-	0.1	28.1	-	13.8	-	-
Mean	-	-	-	-	18.4	34.7	34.7	4.13	49.7	30.6	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	-	-	1,130	2,070	2,130	254	2,950	1,880	-	-

The Period..... Discharge: Daily - Maximum 2 July, 135
 (184 days) - Minimum at various times, 0.1
 Mean 28.6
 Runoff: Acre-feet 10,410

e - Estimated.

Location: Lat. 50° 54' 30", long. 113° 24' 30", in SE. 1/4 sec. 33, tp. 22, rge. 25, W. 4th Mer., Alberta (corrected), about ten miles south of Strathmore, and five miles above confluence with Bow River. Gauge: Staff. Measurement of Discharge: From bridge or by wading. Period of Record: Mainly May to October, 1951 to date. Extremes Recorded: Daily - Maximum, 7 May 1957, 114 cfs, Minimum, 18 July 1955, 0.0 cfs. Remarks: Records good. Discharge is mainly return flow from Western Irrigation District.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	-	11.8	28.7	44.2	29.2	3.1	1.4	-	-
2.....	-	-	-	-	10.7	63	41.7	29.2	2.8	1.4	-	-
3.....	-	-	-	-	3.8	63	41.7	29.2	2.6	1.4	-	-
4.....	-	-	-	-	1.9	63	39.7	29.2	2.6	1.4	-	-
5.....	-	-	-	-	1.8	46.2	37.2	6.4	2.6	1.4	-	-
6.....	-	-	-	-	17.2	3.7	36.7	3.4	2.6	1.6	-	-
7.....	-	-	-	-	9.7	2.3	35.7	3.1	2.6	1.6	-	-
8.....	-	-	-	-	9.1	2.2	35.7	2.5	2.6	1.6	-	-
9.....	-	-	-	-	8.5	1.9	35.7	2.5	2.6	1.1	-	-
10.....	-	-	-	-	7.7	25.2	35.7	2.5	2.6	1.1	-	-
11.....	-	-	-	-	8.3	24.7	36.2	2.5	2.6	1.1	-	-
12.....	-	-	-	-	7.5	24.7	36.2	2.5	2.6	1.1	-	-
13.....	-	-	-	-	42.2	25.7	36.2	2.5	11.0	1.7	-	-
14.....	-	-	-	-	44.7	27.2	36.2	2.2	5.0	1.7	-	-
15.....	-	-	-	-	55	28.7	36.2	2.3	5.0	1.7	-	-
16.....	-	-	-	-	43.7	27.7	35.2	2.6	3.2	1.7	-	-
17.....	-	-	-	-	1.4	27.7	18.2	2.5	3.1	1.7	-	-
18.....	-	-	-	-	1.3	28.2	2.5	2.5	3.1	0.8	-	-
19.....	-	-	-	-	1.2	28.2	2.2	2.5	2.2	0.8	-	-
20.....	-	-	-	-	1.1	28.2	1.6	2.5	2.2	0.2	-	-
21.....	-	-	-	-	1.1	28.2	2.6	2.5	1.8	0.3	-	-
22.....	-	-	-	-	23.7	28.2	2.6	3.4	1.8	0.3	-	-
23.....	-	-	-	-	22.7	28.7	30.7	3.4	1.7	0.3	-	-
24.....	-	-	-	-	17.2	2.3	32.7	3.4	1.7	0.3	-	-
25.....	-	-	-	-	13.0	1.8	32.7	2.8	1.7	0.3	-	-
26.....	-	-	-	-	13.0	1.8	32.7	2.8	1.5	0.3	-	-
27.....	-	-	-	-	11.0	1.8	29.7	4.6	1.5	0.3b	-	-
28.....	-	-	-	-	9.4	4.1	29.7	4.6	1.5	0.3	-	-
29.....	-	-	-	-	1.3	43.7	28.7	3.4	1.5	0.3	-	-
30.....	-	-	-	-	1.8	43.7	28.7	3.4	1.5	0.3	-	-
31.....	-	-	-	-	3.1	-	29.2	3.1	-	0.3b	-	-
Mean	-	-	-	-	13.1	25.2	29.2	6.43	2.76	0.96	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	-	-	806	1,500	1,790	395	164	59	-	-

The Period.....Discharge: Daily - Maximum 2 to 4 June, 63
 (184 days) - Minimum 20 October, 0.2
 Mean 12.9
 Runoff: Acre-feet 4,710

b - Ice conditions 27 to 31 October.

Location: Lat. 50° 51' 20", long. 113° 08' 00", in NW. 1/4 sec. 9, tp. 22, rge. 23, W. 4th Mer., Alberta, about three-quarters of a mile south and three and one-half miles west of Gleichen and three-quarters of a mile above confluence with Bow River. Gauge: Recording. Measurement of Discharge: By wading. Period of Record: Part-year records 1922; May to October, 1957 to date. Records in 1922 were obtained by staff gauge in SE. 1/4 sec. 16 and published under the title "Skelton Creek near Gleichen". Extremes Recorded: Daily - Maximum, September 1922, 200 cfs (estimated), Minimum, Nil at various times in 1922. Remarks: Records excellent. See also records obtained during period 1951 to 1954 at site three miles upstream and called "near Stobart, Station No. 5BM₁₁". Discharge is mainly return flow from Western Irrigation District.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	-	27.6	17.2	13.6	12.4	4.0	4.0	-	-
2.....	-	-	-	-	27.0	19.1	12.8	11.6	3.6	3.6	-	-
3.....	-	-	-	-	22.6	19.1	12.4	12.0	3.6	3.4	-	-
4.....	-	-	-	-	21.6	19.6	12.4	10.8	3.6	3.1	-	-
5.....	-	-	-	-	24.2	19.1	10.8	10.4	3.4	3.3	-	-
6.....	-	-	-	-	37.0	18.1	10.8	9.7	3.3	3.4	-	-
7.....	-	-	-	-	50	18.1	10.4	9.0	3.1	3.8	-	-
8.....	-	-	-	-	44.0	18.6	9.7	8.6	2.9	4.0	-	-
9.....	-	-	-	-	35.1	18.1	9.0	8.0	2.6	3.4	-	-
10.....	-	-	-	-	31.7	17.6	8.6	7.3	2.6	2.6	-	-
11.....	-	-	-	-	30.2	18.1	8.0	7.0	2.6	2.6	-	-
12.....	-	-	-	-	31.7	18.1	8.3	6.4	3.3	2.8	-	-
13.....	-	-	-	-	27.6	19.1	4.4	5.6	7.0	2.8	-	-
14.....	-	-	-	-	23.6	17.6	1.4	5.4	6.7	2.9	-	-
15.....	-	-	-	-	23.6	15.8	1.0	4.6	5.1	2.6	-	-
16.....	-	-	-	-	23.6	16.2	0.9	3.8	4.9	1.5	-	-
17.....	-	-	-	-	23.1	15.8	0.6	3.8	4.6	1.1	-	-
18.....	-	-	-	-	22.1	14.9	0.4	3.4	4.4	1.4	-	-
19.....	-	-	-	-	20.6	13.6	0.2	3.4	4.9	2.3	-	-
20.....	-	-	-	-	21.1	12.8	0.1	3.4	4.4	2.0	-	-
21.....	-	-	-	-	20.6	12.4	0.1	3.4	4.6	1.9	-	-
22.....	-	-	-	-	20.1	12.4	0.5	3.8	3.8	1.8	-	-
23.....	-	-	-	-	21.6	13.2	1.3	3.6	3.6	1.8	-	-
24.....	-	-	-	-	23.1	11.6	0.7	3.4	3.6	1.7	-	-
25.....	-	-	-	-	22.6	10.1	3.7	2.9	4.6	1.7	-	-
26.....	-	-	-	-	20.6	9.7	15.8	2.8	3.6	1.6	-	-
27.....	-	-	-	-	19.1	10.4	14.9	2.8	3.4	1.7	-	-
28.....	-	-	-	-	18.1	14.0	14.5	3.4	3.6	1.8	-	-
29.....	-	-	-	-	18.1	13.6	13.6	3.4	3.6	1.9	-	-
30.....	-	-	-	-	17.2	13.6	13.2	3.8	3.4	1.8	-	-
31.....	-	-	-	-	16.7	-	12.4	3.8	-	2.0	-	-
Mean	-	-	-	-	25.3	15.6	7.31	5.93	3.95	2.46	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	-	-	1,560	927	449	364	235	151	-	-

The Period..... Discharge: Daily - Maximum 7 May, 50
 (184 days) - Minimum 20 and 21 July, 0.1
 Instantaneous Maximum 4 p.m., 6 May, 62
 Mean 10.1
 Runoff: Acre-feet 3,690

Location: Lat. 50° 50' 00", long. 112° 45' 40", in SE. 1/4 sec. 6, tp. 22, rge. 20, W. 4th Mer., Alberta, near Trans-Canada Highway crossing, fourteen miles east of Gleichen and about eight miles above confluence with Bow River.
Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: Mainly May to October, 1951 to date. Extremes Recorded: Daily - Maximum, 3 June 1953, 1,720 cfs, Minimum, 30 and 31 October 1956, 0.5 cfs.
Remarks: Records good. An appreciable proportion of the discharge is return flow from Western Irrigation District. High water mark was found to be at gauge height 11.2 feet on 3 April 1958.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	-	7.0	58	65e	57	53	44.6	-	-
2.....	-	-	-	-	7.2	58		50	48.8	45.3	-	-
3.....	-	-	-	-	7.0	62		42.5	44.6	46.0	-	-
4.....	-	-	-	-	6.2	62		41.8	43.2	43.2	-	-
5.....	-	-	-	-	6.2	61		39.7	41.1	45.3	-	-
6.....	-	-	-	-	6.2	60		38.3	41.8	45.3	-	-
7.....	-	-	-	-	5.9	63		36.2	45.3	41.8	-	-
8.....	-	-	-	-	5.2	63		32.2	46.0	41.1	-	-
9.....	-	-	-	-	5.6	65		40.4	46.0	34.2	-	-
10.....	-	-	-	-	5.6	62		42.5	45.3	28.5	-	-
11.....	-	-	-	-	6.2	62	65e	43.2	43.9	26.7	-	-
12.....	-	-	-	-	17.5	59		42.5	43.2	23.9	-	-
13.....	-	-	-	-	20.0	59		43.2	52	21.1	-	-
14.....	-	-	-	-	17.5	63		42.5	56	17.5	-	-
15.....	-	-	-	-	19.5	61		41.1	58	12.2	-	-
16.....	-	-	-	-	22.8	60	58	40.4	61	8.3	-	-
17.....	-	-	-	-	24.5	59	55	39.0	57	6.7	-	-
18.....	-	-	-	-	23.9	54	57	37.6	51	4.6	-	-
19.....	-	-	-	-	22.8	50	53	36.2	45.3	3.2	-	-
20.....	-	-	-	-	23.3	52	53	34.2	42.5	4.0	-	-
21.....	-	-	-	-	24.5	63	51	36.2	36.2	3.3	-	-
22.....	-	-	-	-	32.2	69	49.5	38.3	39.7	2.7	-	-
23.....	-	-	-	-	32.2	71	49.5	43.9	39.7	2.2	-	-
24.....	-	-	-	-	35.5	68	45.3	48.1	38.3	2.7	-	-
25.....	-	-	-	-	36.2	56	52	52	41.1	2.9	-	-
26.....	-	-	-	-	42.5	54	61	52	41.8	3.0	-	-
27.....	-	-	-	-	48.8	55	60	47.4	39.7	3.2	-	-
28.....	-	-	-	-	51.0	57	59	53	40.4	3.2	-	-
29.....	-	-	-	-	53.0	62	62	61	44.6	3.0	-	-
30.....	-	-	-	-	58.0	62e	61	58	47.4	3.0	-	-
31.....	-	-	-	-	57.0	-	61	59	-	3.0	-	-
Mean	-	-	-	-	23.6	60.3	60.1e	44.2	45.8	18.6	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	-	-	1,450	3,590	3,690	2,720	2,730	1,140	-	-

The Period..... Discharge: Daily - Minimum 23 October, 2.2
 (184 days) Instantaneous Maximum during July, 90e
 Mean 42.0
 Runoff: Acre-feet 15,320

e - Estimated.

Location: Lat. 50° 09' 00", long. 111° 40' 00", in NE. 1/4 sec. 2, tp. 14, rge. 13, W. 4th Mer., Alberta, about one-half mile above confluence with Bow River and twenty miles southeast of Lake Newell. Gauge: Recording. Measurement of Discharge: From bridge or by wading. Period of Record: Mainly May to October, 1951 to date. Records prior to May 1952 were obtained from staff gauge about one-quarter mile downstream and prior to June 1956 from staff gauge about one hundred feet upstream from recorder site. Extremes Recorded: Daily - Maximum, 14 June 1953, 225 cfs, Minimum, 8 May 1955, 0.2 cfs. Remarks: Records fair. An appreciable proportion of the discharge is return flow from Eastern Irrigation District.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	-	0.5e	30.7	25.1	82	51e	58	-	-
2.....	-	-	-	-		35.1	26.6	84		61	-	-
3.....	-	-	-	-		37.9	28.9	76		64	-	-
4.....	-	-	-	-		42.9	30.1	75		69	-	-
5.....	-	-	-	-		41.4	31.9	76		73	-	-
6.....	-	-	-	-	0.5x	46.6	33.8	72	51e	76	-	-
7.....	-	-	-	-		48.9	35.1	68		70	-	-
8.....	-	-	-	-		50	37.2	66		75	-	-
9.....	-	-	-	-		54	39.3	62		76	-	-
10.....	-	-	-	-		47.4	40.0	58		74e	-	-
11.....	-	-	-	-	0.5e	49.6	42.9	56	51e	73e	-	-
12.....	-	-	-	-		48.9	43.6	52		72e	-	-
13.....	-	-	-	-		42.9	49.6	49.6		70	-	-
14.....	-	-	-	-		43.6	54	48.1		67	-	-
15.....	-	-	-	-		41.4	56	47.4		71	-	-
16.....	-	-	-	-	18e	38.6	60	46.6	51e	72	-	-
17.....	-	-	-	-		32.5	64	45.9		72	-	-
18.....	-	-	-	-		30.1	69	45.9		69	-	-
19.....	-	-	-	-		29.5	71	48.1		66	-	-
20.....	-	-	-	-		26.1	74	48.1		82	-	-
21.....	-	-	-	-	18e	28.3	76	48.1	51e	75	-	-
22.....	-	-	-	-		27.7	80	49.6		73	-	-
23.....	-	-	-	-		27.2	93	49.6		64	-	-
24.....	-	-	-	-		26.6	88	49.6		74	-	-
25.....	-	-	-	-		22.6	89	50		68	-	-
26.....	-	-	-	-	18e	21.6	92	50	51e	67	-	-
27.....	-	-	-	-		22.1	92	58		64	-	-
28.....	-	-	-	-		19.8	92	60		63	-	-
29.....	-	-	-	-		25.6	22.1	91		54	-	-
30.....	-	-	-	-		34.5	25.1	89		58	-	-
31.....	-	-	-	-		30.7	-	86	60e	51	-	-
Mean	-	-	-	-	8.46e	35.4	60.6	58.1	51.1e	68.4	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	-	-	520	2,100	3,730	3,570	3,040	4,210	-	-

The Period..... Discharge: Daily - Maximum 23 July, 93
 (184 days) - Minimum at various times, 0.5e
 Instantaneous Maximum 5 a.m., 23 July, 98
 Mean 47.1
 Runoff: Acre-feet 17,170

e - Estimated.

x - Staff gauge reading.

Location: Lat. 50° 13' 20", long. 112° 05' 50", in NE. 1/4 sec. 30, tp. 15, rge. 16, W. 4th Mer., Alberta, about five miles west and fifteen miles north of Vauxhall and about one mile above confluence with Bow River. Gauge: Recording. Measurement of Discharge: By wading. Period of Record: May to October 1958. Extremes Recorded: Daily - Maximum, 18 October 1958, 6.0 cfs, Minimum, at various times, 0.0 cfs; Instantaneous Maximum - 1 a.m., 14 September 1958, 6.7 cfs. Remarks: Records good. Discharge is mainly return flow from Bow River Development irrigation project.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	-	0.6e	0.9	0.8	0.0	3.1	4.5	-	-
2.....	-	-	-	-	0.6e	0.9	0.7	0.0	3.0	3.7	-	-
3.....	-	-	-	-	0.6e	1.4	0.5	0.0	2.8	3.3	-	-
4.....	-	-	-	-	0.6e	0.9	0.4	0.0	2.7	3.1	-	-
5.....	-	-	-	-	0.6e	0.8	0.3	0.0	2.7	3.1	-	-
6.....	-	-	-	-	0.6	0.6	0.3	0.0	2.7	3.3	-	-
7.....	-	-	-	-	0.6	0.5	0.3	0.0	2.7	3.3	-	-
8.....	-	-	-	-	0.6	0.5	0.2	0.0	3.3	3.5	-	-
9.....	-	-	-	-	0.5	0.5	0.2	0.0	3.6	3.2	-	-
10.....	-	-	-	-	0.6	0.9	0.1	0.0	3.7	3.2	-	-
11.....	-	-	-	-	0.6	1.1	0.1	0.0	3.6	3.6	-	-
12.....	-	-	-	-	1.0	1.2	0.0	0.0	3.2	2.9	-	-
13.....	-	-	-	-	2.3	1.1	1.0	0.0	4.7	2.7	-	-
14.....	-	-	-	-	0.8	1.2	1.0	0.1	5.8	2.5	-	-
15.....	-	-	-	-	0.7	2.0	1.7	0.1	5.6	3.0	-	-
16.....	-	-	-	-	0.6	1.5	0.6	0.1	5.5	4.3	-	-
17.....	-	-	-	-	0.5	1.3	0.3	0.0	4.6	5.5	-	-
18.....	-	-	-	-	0.5	1.2	0.3	0.0	3.5	6.0	-	-
19.....	-	-	-	-	0.5	1.1	0.1	0.0	2.9	5.8	-	-
20.....	-	-	-	-	0.5	0.9	0.0	0.1	3.0	5.5	-	-
21.....	-	-	-	-	0.4	0.7	0.0	0.0	2.6	5.6	-	-
22.....	-	-	-	-	0.5	0.6	0.1	0.1	2.2	5.0	-	-
23.....	-	-	-	-	0.5	0.5	4.5	0.4	2.1	4.2	-	-
24.....	-	-	-	-	0.5	0.3	4.6	0.5	1.9	3.5	-	-
25.....	-	-	-	-	0.4	0.2	1.3	0.5	1.3	3.3	-	-
26.....	-	-	-	-	0.3	0.1	0.5	0.8	1.8	2.7	-	-
27.....	-	-	-	-	0.3	0.2	0.3	1.9	2.7	2.5	-	-
28.....	-	-	-	-	0.3	0.7	0.2	3.1	3.5	2.3	-	-
29.....	-	-	-	-	0.3	0.9	0.1	3.7	3.8	1.8	-	-
30.....	-	-	-	-	0.3	0.9	0.1	3.8	4.2	1.2	-	-
31.....	-	-	-	-	0.4	-	0.0	3.6	-	1.0	-	-
Mean	-	-	-	-	0.58	0.85	0.66	0.61	3.29	3.52	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	-	-	36	51	41	37	196	216	-	-

The Period..... Discharge: Daily - Maximum 18 October, 6.0
 (184 days) - Minimum at various times, 0.0
 Instantaneous Maximum 1 a.m., 14 September, 6.7
 Mean 1.58
 Runoff: Acre-feet 577

e - Estimated.

Location: Lat. 49° 58' 35", long. 111° 42' 00", in SW. 1/4 sec. 10, tp. 12, rge. 13, W. 4th Mer., Alberta, eight and one-half miles south and four miles east of Hays and about one and one-half miles above confluence with Bow River. Gauge: Recording. Measurement of Discharge: By wading. Period of Record: May to October, 1957 to date. Extremes Recorded: Daily - Maximum, 26 October 1957, 20.0 cfs, Minimum, Nil at various times; Instantaneous Maximum - 1 p.m., 25 October 1957, 67 cfs. Remarks: Records excellent. Discharge is largely return flow from Bow River Development Irrigation project.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	-	0.5e	4.4	3.2	1.2	1.0	2.5	-	-
2.....	-	-	-	-		4.7	1.3	1.0	0.9	3.1	-	-
3.....	-	-	-	-		5.3	1.3	0.8	0.9	3.2	-	-
4.....	-	-	-	-		8.2	1.3	0.8	0.9	3.6	-	-
5.....	-	-	-	-		5.1	1.4	0.7	0.9	4.2	-	-
6.....	-	-	-	-	0.5e	1.4	1.8	0.9	0.9	4.0	-	-
7.....	-	-	-	-		1.9	2.4	1.3	0.8	4.0	-	-
8.....	-	-	-	-		2.9	4.4	0.9	0.9	5.5	-	-
9.....	-	-	-	-		2.1	5.1	0.8	0.9	6.4	-	-
10.....	-	-	-	-		3.6	5.5	0.7	0.9	6.7	-	-
11.....	-	-	-	-	0.4	3.8	7.1	0.8	0.8	3.6	-	-
12.....	-	-	-	-		4.7	6.7	1.3	1.1	4.4	-	-
13.....	-	-	-	-		0.3	3.4	16.0	1.1	0.9	-	-
14.....	-	-	-	-		0.3	4.0	18.6	0.9	1.1	-	-
15.....	-	-	-	-		0.2	4.4	5.8	1.6	0.8	-	-
16.....	-	-	-	-	0.2	6.0	4.9	3.6	0.7	3.4	-	-
17.....	-	-	-	-	0.2	4.7	4.0	4.0	0.6	1.7	-	-
18.....	-	-	-	-	0.2	5.8	3.2	4.2	0.6	0.9	-	-
19.....	-	-	-	-	0.2	6.0	2.9	4.0	0.6	0.4	-	-
20.....	-	-	-	-	0.2	3.8	4.0	3.4	0.7	0.1	-	-
21.....	-	-	-	-	0.5	3.6	4.7	3.4	0.6	0.0	-	-
22.....	-	-	-	-	5.1	3.4	3.8	3.1	0.6	Nil	-	-
23.....	-	-	-	-	6.4	3.2	8.2	1.6	0.9	Nil	-	-
24.....	-	-	-	-	5.3	1.7	4.7	1.9	0.8	0.1	-	-
25.....	-	-	-	-	5.5	0.9	4.7	1.8	0.8	0.4	-	-
26.....	-	-	-	-	6.4	0.6	4.7	1.8	1.4	0.4	-	-
27.....	-	-	-	-	5.8	0.9	3.8	2.2	3.1	0.5	-	-
28.....	-	-	-	-	6.2	2.5	3.8	3.8	3.6	0.6	-	-
29.....	-	-	-	-	3.2	2.5	3.1	2.1	4.2	0.5	-	-
30.....	-	-	-	-	2.5	3.2	1.8	1.6	2.9	0.5	-	-
31.....	-	-	-	-	3.6	-	1.5	1.4	-	0.4	-	-
Mean	-	-	-	-	1.88	3.62	4.70	1.89	1.19	2.33	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	-	-	116	216	289	116	71	143	-	-

The Period..... Discharge: Daily - Maximum 14 July, 18.6
 (184 days) - Minimum at various times, Nil
 Instantaneous Maximum 4 p.m., 14 July, 21.0
 Mean 2.61
 Runoff: Acre-feet 951

e - Estimated.

Location: Lat. 50° 13' 15", long. 112° 05' 55", in NW. 1/4 sec. 34, tp. 14, rge. 16, W. 4th Mer., Alberta, ten and one-half miles north of Vauxhall approximately three-quarters of a mile above confluence with Bow River. Gauge: Recording. Measurement of Discharge: From bridge or by wading. Period of Record: May to October, 1957 to date. Records for 1957 were obtained about one mile downstream. Extremes Recorded: Daily - Maximum, 23 July 1958, 55 cfs, Minimum, Nil at various times; Instantaneous Maximum - 5 p.m., 23 July 1958, 62 cfs. Revisions: Runoff for 1957 has been corrected to 4,650 acre-feet (estimated). Remarks: Records good. Discharge is mainly return flow from Bow River Development irrigation project.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	-	0.0e	16.8	38.2	3.6	8.4	8.9	-	-
2.....	-	-	-	-	0.0e	23.6	39.5	3.7	9.8	9.3	-	-
3.....	-	-	-	-	0.0	16.4	33.3	3.9	15.8	10.3	-	-
4.....	-	-	-	-	0.0	14.1	28.4	4.5	15.8	7.6	-	-
5.....	-	-	-	-	0.0	16.8	31.2	7.2	13.6	9.1	-	-
6.....	-	-	-	-	Nil	17.8	23.7	8.9	12.4	16.9	-	-
7.....	-	-	-	-	"	16.1	32.1	7.0	12.6	24.2	-	-
8.....	-	-	-	-	"	14.4	28.7	6.4	11.4	25.9	-	-
9.....	-	-	-	-	"	18.1	26.7	8.0	9.8	26.7	-	-
10.....	-	-	-	-	"	26.7	24.5	9.3	9.6	24.5	-	-
11.....	-	-	-	-	"	28.7	22.8	8.2	7.6	25.9	-	-
12.....	-	-	-	-	"	27.3	20.7	10.0	8.0	26.7	-	-
13.....	-	-	-	-	"	23.9	36.0	10.5	11.9	22.6	-	-
14.....	-	-	-	-	"	22.8	46.3	9.3	11.9	14.2	-	-
15.....	-	-	-	-	"	43.4	36.3	8.2	10.3	10.5	-	-
16.....	-	-	-	-	1.6	55	22.3	4.7	5.0	10.0	-	-
17.....	-	-	-	-	0.9	44.3	24.7	3.3	6.8	12.6	-	-
18.....	-	-	-	-	0.8	37.0	31.0	3.4	6.2	12.2	-	-
19.....	-	-	-	-	2.6	34.2	25.6	4.4	7.2	15.1	-	-
20.....	-	-	-	-	3.9	34.2	28.4	7.6	7.8	12.9	-	-
21.....	-	-	-	-	3.9	33.6	28.7	8.0	10.7	13.1	-	-
22.....	-	-	-	-	4.4	36.6	26.7	8.7	8.0	13.1	-	-
23.....	-	-	-	-	6.0	40.4	55	7.4	7.6	9.1	-	-
24.....	-	-	-	-	7.8	30.7	24.8	6.6	10.7	2.4	-	-
25.....	-	-	-	-	8.7	25.6	8.4	6.2	7.6	2.2	-	-
26.....	-	-	-	-	10.0	22.0	5.4	5.0	3.6	1.7	-	-
27.....	-	-	-	-	9.8	24.2	4.4	6.4	5.4	0.7	-	-
28.....	-	-	-	-	10.5	35.4	3.7	7.8	5.4	0.3	-	-
29.....	-	-	-	-	7.0	53	7.8	9.3	4.7	0.2	-	-
30.....	-	-	-	-	6.4	47.0	5.8	8.2	3.1	0.2	-	-
31.....	-	-	-	-	9.1	-	4.5	8.7	-	0.2	-	-
Mean	-	-	-	-	3.01	29.3	25.2	6.92	8.96	11.9	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	-	-	185	1,750	1,550	425	533	732	-	-

The Period..... Discharge: Daily - Maximum 16 June and 23 July, 55
 (184 days) - Minimum in May, Nil
 Instantaneous Maximum 5 p.m., 23 July, 62
 Mean 14.2

Runoff: Acre-feet 5,180

e - Estimated.

BOW RIVER DEVELOPMENT DRAIN "D" NEAR VAUXHALL - STATION No. 5BN₈

Location: Lat. 50° 11' 40", long. 112° 02' 50", in SW. 1/4 sec. 30, tp. 14, rge. 15, W. 4th Mer., Alberta, about eight and one-half miles north and two miles east of Vauxhall and about three-quarters of a mile above confluence with Bow River. Gauge: Recording. Measurement of Discharge: By wading. Period of Record: May to October 1958. Extremes Recorded: Daily - Maximum, 28 June 1958, 26.2 cfs, Minimum, at various times. 0.1 cfs; Instantaneous Maximum - 9 a.m., 23 July 1958, 37.4 cfs. Remarks: Records good. Discharge is mainly return flow from Bow River Development irrigation project.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	-	0.2e	2.7	15.1	1.5	0.4	1.8	-	-
2.....	-	-	-	-	0.2e	17.9	13.5	3.0	0.5	1.5	-	-
3.....	-	-	-	-	0.2	14.6	9.5	3.4	1.5	1.1	-	-
4.....	-	-	-	-	0.2	7.6	9.0	3.0	1.5	1.2	-	-
5.....	-	-	-	-	0.1	12.0	9.0	5.8	1.0	1.5	-	-
6.....	-	-	-	-	0.1	15.7	8.0	4.2	1.1	1.6	-	-
7.....	-	-	-	-	0.1	14.6	11.5	4.2	0.7	1.3	-	-
8.....	-	-	-	-	0.1	12.0	12.5	5.0	0.5	1.6	-	-
9.....	-	-	-	-	0.1	11.5	7.6	6.7	0.4	1.8	-	-
10.....	-	-	-	-	0.1	14.6	6.7	8.0	0.3	1.6	-	-
11.....	-	-	-	-	0.1	15.7	7.6	6.7	0.2	2.3	-	-
12.....	-	-	-	-	0.1	17.3	9.0	7.1	0.2	3.4	-	-
13.....	-	-	-	-	0.1	21.6	23.5	8.5	0.4	3.4	-	-
14.....	-	-	-	-	0.1	23.5	22.9	6.2	0.8	2.0	-	-
15.....	-	-	-	-	0.1	24.2	14.0	5.4	0.9	1.6	-	-
16.....	-	-	-	-	0.1	22.2	9.5	5.8	1.1	1.6	-	-
17.....	-	-	-	-	0.1	16.2	6.2	3.8	0.9	1.8	-	-
18.....	-	-	-	-	0.2	15.1	10.0	2.3	0.8	1.8	-	-
19.....	-	-	-	-	0.2	11.5	10.5	0.9	0.8	3.4	-	-
20.....	-	-	-	-	0.2	6.7	10.5	0.8	0.8	3.8	-	-
21.....	-	-	-	-	0.1	6.7	9.5	1.6	0.7	3.4	-	-
22.....	-	-	-	-	0.1	13.5	9.5	0.8	0.9	3.8	-	-
23.....	-	-	-	-	0.1	15.7	23.5	1.0	2.0	3.0	-	-
24.....	-	-	-	-	1.8	10.5	5.8	3.8	2.7	1.6	-	-
25.....	-	-	-	-	0.5	5.8	6.2	5.0	2.7	1.2	-	-
26.....	-	-	-	-	0.3	3.8	6.7	5.4	1.2	0.9	-	-
27.....	-	-	-	-	3.1	9.0	4.6	1.5	1.3	0.8	-	-
28.....	-	-	-	-	6.2	26.2	1.8	2.0	1.3	0.7	-	-
29.....	-	-	-	-	3.0	21.6	1.2	1.8	1.2	0.4	-	-
30.....	-	-	-	-	1.3	17.3	3.0	0.8	2.0	0.2	-	-
31.....	-	-	-	-	0.9	-	2.0	0.6	-	0.1	-	-
Mean	-	-	-	-	0.65	14.2	9.67	3.76	1.03	1.81	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	-	-	40	848	595	231	61	111	-	-

The Period..... Discharge: Daily - Maximum 28 June, 26.2
 (184 days) - Minimum at various times, 0.1
 Instantaneous Maximum 9 a.m., 23 July, 37.4
 Mean 5.17
 Runoff: Acre-feet 1,890

e - Estimated.

Location: Lat. 50° 02' 40", long. 111° 35' 00", in NE. 1/4 sec. 33, tp. 12, rge. 12, W. 4th Mer., Alberta, about nine miles east and four miles south of Hays. Gauge: Recording. Measurement of Discharge: From bridge or by wading. Period of Record: May to October, 1957 to date. Extremes Recorded: Daily - Maximum, 23 October 1958, 108 cfs, Minimum, Nil at various times; Instantaneous Maximum - 4 p.m., 23 October 1957, 538 cfs. Remarks: Records excellent. Discharge is mainly return flow from Bow River Development irrigation project. Wasteway discharges directly to Bow River.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	-	Nil	17.9	53	86	12.1	46.6	-	-
2.....	-	-	-	-	"	6.0	52	87	8.6	45.6	-	-
3.....	-	-	-	-	"	39.7	46.6	87	13.5	61	-	-
4.....	-	-	-	-	"	47.6	38.8	86	17.2	55	-	-
5.....	-	-	-	-	"	24.8	29.0	85	17.9	56	-	-
6.....	-	-	-	-	"	15.7	27.3	82	17.9	55	-	-
7.....	-	-	-	-	"	30.7	32.4	82	19.4	53	-	-
8.....	-	-	-	-	"	38.8	41.6	76	18.7	51	-	-
9.....	-	-	-	-	"	29.0	42.6	64	15.7	43.6	-	-
10.....	-	-	-	-	"	34.8	29.9	36.9	16.4	27.0	-	-
11.....	-	-	-	-	"	67	17.2	34.1	17.9	7.2	-	-
12.....	-	-	-	-	"	62	14.9	34.1	19.4	3.3	-	-
13.....	-	-	-	-	"	48.6	17.2	29.0	27.3	5.0	-	-
14.....	-	-	-	-	"	30.7	14.2	24.0	22.4	3.1	-	-
15.....	-	-	-	-	"	28.2	25.4	26.5	20.2	3.0	-	-
16.....	-	-	-	-	"	29.0	69	14.2	20.9	0.0	-	-
17.....	-	-	-	-	"	35.9	70	13.5	24.8	3.0	-	-
18.....	-	-	-	-	1.5	46.6	40.7	11.4	24.0	4.6	-	-
19.....	-	-	-	-	5.0	41.6	46.6	10.0	25.6	7.9	-	-
20.....	-	-	-	-	45.5	32.4	43.6	10.0	23.2	44.2	-	-
21.....	-	-	-	-	29.9	29.0	41.6	17.2	25.6	104	-	-
22.....	-	-	-	-	25.6	30.7	35.0	20.2	23.2	103	-	-
23.....	-	-	-	-	24.0	39.7	42.6	17.9	26.5	108	-	-
24.....	-	-	-	-	19.4	43.6	65	20.2	27.3	91	-	-
25.....	-	-	-	-	37.8	34.1	75	19.4	28.2	63	-	-
26.....	-	-	-	-	38.8	30.7	76	24.8	24.0	48.6	-	-
27.....	-	-	-	-	20.9	30.7	77	27.3	23.2	32.4	-	-
28.....	-	-	-	-	21.7	41.6	81	29.9	24.0	36.9	-	-
29.....	-	-	-	-	18.7	43.6	93	38.8	24.0	32.4	-	-
30.....	-	-	-	-	17.2	42.6	87	38.8	27.3	18.7	-	-
31.....	-	-	-	-	22.4	-	88	17.3	-	11.4	-	-
Mean	-	-	-	-	10.6	35.8	48.8	40.3	21.2	39.5	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	-	-	651	2,130	3,000	2,480	1,260	2,430	-	-

The Period..... Discharge: Daily - Maximum 23 October, 108
 (184 days) - Minimum at various times, Nil
 Instantaneous Maximum 5 p.m., 23 October, 120
 Mean 32.8
 Runoff: Acre-feet 11,950

Source: Bow River. Location: Lat. 51° 01' 00", long. 113° 50' 30", in NE. 1/4 sec. 4, tp. 24, rge. 28, W. 4th Mer., Alberta, about twelve miles below headgate and one mile above Chestermere Lake. Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: Irrigation seasons 1908 to date. Prior to 1947, records were collected at various locations near the headgate and published under title, "W. I. D. Canal near Ogden" and prior to 1944 under title "Canadian Pacific Railway Company Canal at Ogden" or "Canadian Pacific Railway Company Canal near Calgary". Records prior to 1917 obtained by manual gauges. Extremes Recorded: Daily - Maximum, 16 July 1930, 1,600 cfs; Instantaneous Maximum - 7 p.m., 16 July 1930, 1,640 cfs. Revisions: Mean discharge for 23 to 30 April 1912 has been corrected to 149 cfs; runoff for April 1912 and for the year 1912 have been corrected to 2,364 cfs and 58,764 acre-feet; July 1912 mean discharge and runoff have been corrected to 1,059 cfs and 65,100 acre-feet; mean discharge for partial month of April 1931 has been corrected to 162 cfs; July 1938 mean discharge has been corrected to 852 cfs; the summary data as published for the following months refer to a partial month only: May and October 1927, May and September 1928, May 1932, May and September 1935, October 1948, April and October 1948. Remarks: Records fair.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	-	0.2	530	382	345e	325	327	0.9	-
2.....	-	-	-	-	72	549	357	336e	325	144	0.6	-
3.....	-	-	-	-	184	569		328e	323	34.5	0.6	-
4.....	-	-	-	-	307	488		320e	328	21.0	-	-
5.....	-	-	-	-	357	368		311x	342	13.8	-	-
6.....	-	-	-	-	372	402		302	359	9.5	-	-
7.....	-	-	-	-	430	419		309x	325	6.6	-	-
8.....	-	-	-	-	170	451			317	5.7	-	-
9.....	-	-	-	-	247	428	320e		351	4.9	-	-
10.....	-	-	-	-	313	446			355	3.4	-	-
11.....	-	-	-	-	262	433			323	3.4	-	-
12.....	-	-	-	-	345	408			317	3.4	-	-
13.....	-	-	-	-	345	380			352	3.4	-	-
14.....	-	-	-	-	321	347		340e	252	2.8	-	-
15.....	-	-	-	-	243	355			305	2.8	-	-
16.....	-	-	-	-	300	349	286x		282	2.3	-	-
17.....	-	-	-	-	387	333	291e		313	1.9	-	-
18.....	-	-	-	-	484	343	295e		298	2.3	-	-
19.....	-	-	-	-	426	355	300e		311	2.3	-	-
20.....	-	-	-	-	428	362e	304e		357	3.4	-	-
21.....	-	-	-	-	402	369e	309x	368	349	1.9	-	-
22.....	-	-	-	-	442	376	347x	385	335	2.3	-	-
23.....	-	-	-	-	458	351	362	366	347	2.3	-	-
24.....	-	-	-	1.5	513	366	368	355	333	2.3	-	-
25.....	-	-	-	1.2	549e	359	378	331	321	2.3	-	-
26.....	-	-	-	1.5	584e	385	368	345	315	2.8	-	-
27.....	-	-	-	0.9	620e	430	355	347	319	2.3	-	-
28.....	-	-	-	1.2	656	426	339	302	319	2.8	-	-
29.....	-	-	-	0.9	598	366	345	300	321	2.8	-	-
30.....	-	-	-	0.4	596	359	362	319	325	1.9	-	-
31.....	-	-	-	-	601	-	354e	331	-	1.2	-	-
Mean	-	-	-	-	387	403	331e	336e	325	20.1	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	-	-	23,830	24,000	20,350	20,670	19,330	1,240	-	-

The Period..... Discharge: Daily - Maximum 28 May, 656
 (184 days) Instantaneous Maximum 9 p.m., 28 May, 696
 Runoff: Acre-feet 109,400

e - Estimated.

x - Staff gauge readings.

Source: Bow River. Location: Lat. 50° 45', long. 113° 01', in SE. 1/4 sec. 5, tp. 21, rge. 22, W. 4th Mer., Alberta, about one thousand feet above Drop No. 1475, six miles east of Arrowwood and about nine miles below headgates near Carseland. Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: Irrigation seasons 1918 to date. Records prior to 1954 were obtained at a point further down canal than present site and about one mile above Lake McGregor. Records prior to 1952 were published under the title "Canada Land and Irrigation Company Canal near Lake McGregor". Records prior to 1922 obtained by manual gauge. Extremes Recorded: Daily - Maximum, at present site, 8 August 1957, 1,300 cfs. Revisions: Summary data as published for July and August 1919 and November 1921 refer to partial month only; 1931 to 1945 records are published in W.R.P. 97; 1945, W.R.P. 109; 1938 and 1939 records are reversed in W.R.P. 97; runoff for July 1946 and for the year 1946 have been corrected to 17,300 and 94,200 acre-feet. Remarks: Records good. No flow during 1951. Canal was under repairs and enlargement by P. F. R. A. during that season. Total diversion during 1952 was an estimated 450 acre-feet during July. Data from 1931 to 1950 supplied by C. L. & I. Co. and for 1951 to 1953 by P. F. R. A.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	-	}	3.6	100	797	792	467	-	-
2.....	-	-	-	-		25.5	140	782	797	415	-	-
3.....	-	-	-	-		32.0	180	777	792	406	-	-
4.....	-	-	-	-		40.0	186	777	797	248	-	-
5.....	-	-	-	-		54	186	767	797	189	-	-
6.....	-	-	-	-	}	56	326	762	802	186	-	-
7.....	-	-	-	-		46.0	593	762	802	180	-	-
8.....	-	-	-	-		34.0	669	777	772	180	-	-
9.....	-	-	-	-		34.0	693	767	777	180	-	-
10.....	-	-	-	-		36.0	684	772	792	180	-	-
11.....	-	-	-	-		34.0	838	767	777	80	-	-
12.....	-	-	-	-		38.0	874	777	772	25.5	-	-
13.....	-	-	-	-		38.0	884	772	797	21.0	-	-
14.....	-	-	-	-		34.0	916	767	792	16.5	-	-
15.....	-	-	-	-		22.5	900	772	777	14.5	-	-
16.....	-	-	-	-	}	19.5	838	777	787	14.0	-	-
17.....	-	-	-	-		18.0	828	772	772	13.5	-	-
18.....	-	-	-	-		18.0	807	772	772	10.5	-	-
19.....	-	-	-	-		14.5	792	777	752	8.6	-	-
20.....	-	-	-	-		14.0	792	777	752	8.4	-	-
21.....	-	-	-	-		14.5	807	777	747	7.0	-	-
22.....	-	-	-	-		16.5	828	787	752	6.0	-	-
23.....	-	-	-	-		25.5	838	787	757	4.4	-	-
24.....	-	-	-	-		24.0	838	787	762	3.1	-	-
25.....	-	-	-	-		24.0	848	787	752	2.0	-	-
26.....	-	-	-	-	}	32.0	822	792	752	1.5	-	-
27.....	-	-	-	-		34.0	812	797	679	-	-	-
28.....	-	-	-	-		36.0	802	792	660	-	-	-
29.....	-	-	-	-		58	787	797	508	0.5e	-	-
30.....	-	-	-	-		98	802	797	467	-	-	-
31.....	-	-	-	-		-	802	797	-	-	-	-
Mean	-	-	-	-	0.45e	32.5	684	780	750	92.6	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	-	-	28	1,930	42,070	47,930	44,640	5,690	-	-

The Period..... Discharge: Daily - Maximum 14 July, 916
 (184 days) Instantaneous Maximum 12:30 a.m., 15 July, 931
 Runoff: Acre-feet 142,300

e - Estimated.

Source: Bow River (via E. I. D. Main Canal). Location: Lat. 50° 47' 20", long. 112° 26' 10", in NE, 1/4 sec. 16, tp. 21, rge. 18, W. 4th Mer., Alberta, about three miles below headgate on E. I. D. Main Canal and one mile east of Bassano. Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: Irrigation seasons 1914 to 1930 and 1945 to date; miscellaneous measurements in 1944. Records prior to 1945 were obtained in NW, 1/4 sec. 3, near headgate, and published under the title "Canadian Pacific Railway Company Canal, North Branch, near Bassano". Records prior to 1919 obtained by manual gauge. Extremes Recorded: Daily - Maximum, 1 August 1954, 470 cfs; Instantaneous Maximum - 3:30 p.m., 16 September 1952, 745 cfs. Remarks: Records fair.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	Nil	1.6	324	167	227	13.1	72	-	-
2.....	-	-	-	"	1.3	317	167	227	11.5	72	-	-
3.....	-	-	-	"	0.9	300	150	225	11.5	72	-	-
4.....	-	-	-	"	0.7	305	130	223	11.5	71	-	-
5.....	-	-	-	"	0.6	303	136	220	10.0	72	-	-
6.....	-	-	-	"	0.6	300	137	222	10.7	95	-	-
7.....	-	-	-	"	0.9	288	126	235	11.5	114	-	-
8.....	-	-	-	"	1.3	296	136	250	11.5	113	-	-
9.....	-	-	-	"	1.5	307	138	252	11.5	116	-	-
10.....	-	-	-	"	1.8	298	136	254	10.7	113	-	-
11.....	-	-	-	"	2.4	296	179	259	11.5	114	-	-
12.....	-	-	-	"	2.8	293	209	264	64	114	-	-
13.....	-	-	-	"	55	291	207	271	108	114	-	-
14.....	-	-	-	"	56	293	207	274	108	113	-	-
15.....	-	-	-	"	53	290	206	279	106	63	-	-
16.....	-	-	-	"	64	274	201	281	83	0.5	-	-
17.....	-	-	-	"	82	278	187	284	100	0.1	-	-
18.....	-	-	-	"	86	303	167	284	98	0.0	-	-
19.....	-	-	-	"	88	307	163	290	94	Nil	-	-
20.....	-	-	-	"	104	305	163	293	95	"	-	-
21.....	-	-	-	"	125	302	175	266	94	"	-	-
22.....	-	-	-	"	149	296	223	234	89	"	-	-
23.....	-	-	-	"	161	329	234	234	88	"	-	-
24.....	-	-	-	"	161	366	234	232	86	"	-	-
25.....	-	-	-	"	155	390	228	227	82	"	-	-
26.....	-	-	-	"	185	426	230	195	78	"	-	-
27.....	-	-	-	"	209	434	223	163	78	"	-	-
28.....	-	-	-	"	257	409	225	164	78	"	-	-
29.....	-	-	-	"	315	364	228	156	77	"	-	-
30.....	-	-	-	"	327	260	230	81	74	"	-	-
31.....	-	-	-	-	317	-	235	12.3	-	"	-	-
Mean	-	-	-	Nil	95.7	318	186	228	60.2	46.1	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	-	Nil	5,880	18,930	11,460	14,040	3,580	2,830	-	-

The Period..... Discharge: Daily - Maximum 27 June, 434

(214 days) Instantaneous Maximum 1 p.m., 27 June, 449

Runoff: Acre-feet 56,720

Source: Bow River (via E. I. D. East Branch Canal). Location: Lat. 50° 43' 20", long. 112° 20' 20", in SE. 1/4 sec. 30, tp. 20, rge. 17, W. 4th Mer., Alberta, immediately below headgates on E. I. D. East Branch Canal and about eight miles below Bassano Dam. Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: Irrigation seasons 1917 to 1930 and 1945 to date; miscellaneous measurements in 1942 and 1944. From 1945 to 1953 the records were based on observations of head on gates and width of gate openings. Records were collected by staff gauge about one mile below present site in 1917 and near present site from 1918 to 1919. A recorder was used from 1920 to 1930 and from 1954 to date at the present site. Extremes Recorded: Daily - Maximum, 26 and 27 June 1945, 1,050 cfs. Remarks: Records fair. Prior to 1942, records were not published and are available upon application to the District Engineer at Calgary, for address see page 6.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	-	0.9	721	534	476	20.2	225	-	-
2.....	-	-	-	-	1.7	718	525	476	18.4	223	-	-
3.....	-	-	-	-	0.9	711	519	479	16.6	225	-	-
4.....	-	-	-	-	1.0	714	468	485	15.7	223	-	-
5.....	-	-	-	-	1.0	711	380	490	15.7	220	-	-
6.....	-	-	-	-	1.0	714	320	490	14.9	217	-	-
7.....	-	-	-	-	1.2	711	314	493	14.1	220	-	-
8.....	-	-	-	-	1.2	714	314	493	14.1	257	-	-
9.....	-	-	-	-	94	886	314	493	14.1	274	-	-
10.....	-	-	-	-	190	978	314	499	14.1	274	-	-
11.....	-	-	-	-	193	975	314	499	13.3	279	-	-
12.....	-	-	-	-	236	986	317	508	76	296	-	-
13.....	-	-	-	-	290	978	323	531	113	296	-	-
14.....	-	-	-	-	304	982	377	543	108	296	-	-
15.....	-	-	-	-	317	956	420	546	106	274	-	-
16.....	-	-	-	-	320	805	420	543	108	244	-	-
17.....	-	-	-	-	323	729	415	537	151	8.9	-	-
18.....	-	-	-	-	323	732	412	528	177	0.3	-	-
19.....	-	-	-	-	323	729	426	525	212	0.3	-	-
20.....	-	-	-	-	345	736	440	525	231	0.4	-	-
21.....	-	-	-	-	367	739	450	522	228	0.4	-	-
22.....	-	-	-	-	373	739	502	519	228	0.4	-	-
23.....	-	-	-	-	373	711	496	513	231	0.4	-	-
24.....	-	-	-	-	464	678	474	513	228	0.4	-	-
25.....	-	-	-	-	519	667	474	502	231	0.4	-	-
26.....	-	-	-	-	540	671	474	465	228	0.4	-	-
27.....	-	-	-	-	558	725	471	454	231	0.3	-	-
28.....	-	-	-	-	656	794	482	451	225	0.3	-	-
29.....	-	-	-	-	714	750	490	219	225	0.3	-	-
30.....	-	-	-	-	725	665	482	21.1	225	0.3	-	-
31.....	-	-	-	-	718	-	482	22.0	-	0.3	-	-
Mean	-	-	-	-	299	778	424	463	124	131	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	-	-	18,390	46,260	26,070	28,480	7,400	8,050	-	-

The Period..... Discharge: Daily - Maximum 12 June, 986
 (184 days) Instantaneous Maximum 1 p.m., 9 June, 997
 Runoff: Acre-feet 134,600

Source: Bow River (via E.I.D. Main Canal). Location: Lat. 50° 43' 20", long. 112° 20' 20", in SE. 1/4 sec. 30, tp. 20, rge. 17, W. 4th Mer., Alberta, about eight miles east of Bassano Dam and immediately below Springhill Canal head-gate. Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: Irrigation seasons 1917 to 1930 and 1945 to date; miscellaneous measurements in 1942 and 1944. Records were collected by manual gauge at Flume No. 2 in SW. 1/4 sec. 3 prior to 1920, by recorder at Flume No. 1 in NE. 1/4 sec. 5 from 1921 to 1927 and at Bridge No. 8 in SE. 1/4 sec. 4 from 1928 to 1930. Prior to 1931 the records were combined with the Springhill Canal records and other minor diversions above the station and published under the title "Canadian Pacific Railway Company Canal, East Branch, near Bassano". Extremes Recorded: Daily - Maximum, 8 August 1951, 1,410 cfs; Instantaneous Maximum - 8:40 a.m., 10 August 1951, 1,440 cfs. Revisions: 1945, W.R.P. 117. Remarks: Records fair.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	-	226	1,120	1,140	864	752e	805	-	-
2.....	-	-	-	-	330	1,140	1,120	888	737x	820	-	-
3.....	-	-	-	-	305	1,120	1,150	893	730e	810	-	-
4.....	-	-	-	-	233	1,120	1,180	888	722e	692	-	-
5.....	-	-	-	-	238	1,120	1,180	864	714e	614	-	-
6.....	-	-	-	-	238	1,110	1,160	874	707	604	-	-
7.....	-	-	-	-	398	1,070	1,160	879	712	575	-	-
8.....	-	-	-	-	560	1,100	1,160	864	707	565	-	-
9.....	-	-	-	-	541	1,110	1,160	864	712	570	-	-
10.....	-	-	-	-	536	1,100	1,140	854	737	555	-	-
11.....	-	-	-	-	531	1,110	1,150	864	732	570	-	-
12.....	-	-	-	-	560	1,110	1,140	888	742	599	-	-
13.....	-	-	-	-	565	1,120	1,120	918	746	585	-	-
14.....	-	-	-	-	734	1,140	1,110	918	746	580	-	-
15.....	-	-	-	-	786	1,130	1,120	923	742	276	-	-
16.....	-	-	-	-	820	1,090	1,140	888	746	4.6	-	-
17.....	-	-	-	-	849	1,090	994	864	746	1.2	-	-
18.....	-	-	-	-	825	1,080	864	849	761	1.7	-	-
19.....	-	-	-	-	854	1,040	903	849	771	1.5	-	-
20.....	-	-	-	-	781	1,080	942	849	766	1.4	-	-
21.....	-	-	-	-	938	1,060	938	864x	800	1.2	-	-
22.....	-	-	-	-	1,010	1,040	903	869e	805	1.1	-	-
23.....	-	-	-	-	972	1,070	869	874x	795	1.2	-	-
24.....	-	-	-	-	933	1,120	835	874e	810	1.1	-	-
25.....	-	-	-	-	908	1,100	805	825	825	1.0	-	-
26.....	-	-	-	-	928	1,160	820	771	795	1.0	-	-
27.....	-	-	-	-	967	1,190	795	781	800	1.0	-	-
28.....	-	-	-	-	1,010	1,190	810	790	810	1.0	-	-
29.....	-	-	-	-	1,040	1,080	844	824	795	1.0	-	-
30.....	-	-	-	-	1,120	1,040	854	771	805	1.0	-	-
31.....	-	-	-	-	1,080	-	869	766	-	1.0	-	-
Mean	-	-	-	-	704	1,105	1,012	856	759	298	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	-	-	43,290	65,750	62,230	52,660	45,160	18,330	-	-

The Period.....Discharge: Daily - Maximum 27 June, 1,190
(184 days) Instantaneous Maximum 9 a.m., 27 June, 1,240
Runoff: Acre-feet 287,400

e - Estimated. x - Staff gauge readings.

Source: Bow River (via E. I. D. East Branch Canal and Lake Newell). Location: Lat. 50° 29' 30", long. 111° 54' 05", in NW. 1/4 sec. 5, tp. 18, rge. 14, W. 4th Mer., Alberta, about one thousand feet below headgate at northeast corner of Lake Newell and five miles south of Brooks. Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: Irrigation seasons 1917, 1918, 1922 to 1925 and 1955 to date; miscellaneous measurements in 1921. Records for 1917 were published under the title "Canadian Pacific Railway Company Canal at Bantry Headgates near Brooks". Records for 1918 were obtained by combining records from stations on North Bantry and West Bantry Canals and were not published. Records for 1921 to 1925 were collected about two miles down canal from present site and were not published. Records for 1955 and 1956 obtained from staff at present site. Extremes Recorded: Daily - Maximum, 11 July 1957, 738 cfs. Remarks: Records fair.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	-	0.0e	676	469	345	Nil	118	-	-
2.....	-	-	-	-	0.0e	664	469	384	"	117	-	-
3.....	-	-	-	-	0.0e	622	469	395	"	116	-	-
4.....	-	-	-	-	0.0e	517	470	433	"	113	-	-
5.....	-	-	-	-	0.0e	462	469	454	"	112	-	-
6.....	-	-	-	-	60e	462	467	453	"	110	-	-
7.....	-	-	-	-	120e	462	464	462	"	106	-	-
8.....	-	-	-	-	120e	470	433	469	"	157	-	-
9.....	-	-	-	-	120	522	411	475	"	190	-	-
10.....	-	-	-	-	119	529	422	483	"	189	-	-
11.....	-	-	-	-	119	527	425	495	252	183	-	-
12.....	-	-	-	-	128	536	425	503	405	166	-	-
13.....	-	-	-	-	145	566	421	512	384	162	-	-
14.....	-	-	-	-	210	578	323	520	336	159	-	-
15.....	-	-	-	-	233	582	272	531	308	132	-	-
16.....	-	-	-	-	293	578	274	541	304	89	-	-
17.....	-	-	-	-	292	576	298	549	306	27.8	-	-
18.....	-	-	-	-	292	592	331	556	300	4.6	-	-
19.....	-	-	-	-	294	610	344	561	287	2.0	-	-
20.....	-	-	-	-	299	612	349	563	258	1.6	-	-
21.....	-	-	-	-	359	515	352	570	236	1.1	-	-
22.....	-	-	-	-	406	2.6	368	541	244	0.9	-	-
23.....	-	-	-	-	512	74	342	498	280	0.8	-	-
24.....	-	-	-	-	548	249	266	481	242	0.6	-	-
25.....	-	-	-	-	617	462	270	488	191	0.5	-	-
26.....	-	-	-	-	617	502	244	214	168	0.3	-	-
27.....	-	-	-	-	651	510	230	10.5	125	0.3	-	-
28.....	-	-	-	-	689	500	227	6.7	125	0.2	-	-
29.....	-	-	-	-	694	472	212	5.9	122	0.1	-	-
30.....	-	-	-	-	693	469	210	4.0	120	0.1	-	-
31.....	-	-	-	-	682	-	280	0.8	-	0.1e	-	-
Mean	-	-	-	-	300	497	355	403	166	72.9	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	-	-	18,470	29,550	21,830	24,800	9,900	4,480	-	-

The Period..... Discharge: Daily - Maximum 29 May, 694
 (184 days) Instantaneous Maximum 5 p.m., 29 May, 711
 Runoff: Acre-feet 109,000

e - Estimated.

Source: Bow River (via E. I. D. East Branch and Main Bantry Canals). Location: Lat. 50° 32' 05", long. 111° 49' 10", in SE. 1/4 sec. 23, tp. 18, rge. 14, W. 4th Mer., Alberta, about two hundred feet below headgate on E. I. D. Main Bantry Canal and three miles east and two miles south of Brooks. Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: Irrigation seasons 1918 and 1955 to date; miscellaneous measurements in 1942 and 1943. The recorder was established on 16 May 1957 to replace former staff gauge at the same location. Extremes Recorded: Daily - Maximum, 12 July 1957, 248 cfs. Remarks: Records fair. Records for 1918 were not published but were used to derive total discharge in Main Bantry Canal.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	-	Nil	154	182	83	Nil	29.7	-	-
2.....	-	-	-	-	"	153	186	85	"	29.2	-	-
3.....	-	-	-	-	"	153	189	86	"	29.2	-	-
4.....	-	-	-	-	"	141	189	86	"	28.7	-	-
5.....	-	-	-	-	"	135	190	89	"	27.7	-	-
6.....	-	-	-	-	"	135	191	85	"	27.2	-	-
7.....	-	-	-	-	"	142	192	84	"	25.8	-	-
8.....	-	-	-	-	8e	142	181	83	"	40.4	-	-
9.....	-	-	-	-	19.6	146e	175	82	"	61	-	-
10.....	-	-	-	-	19.2	150e	185	82	"	62	-	-
11.....	-	-	-	-	18.8	153e	183	81	14.7	61	-	-
12.....	-	-	-	-	17.6	157x	182	88	78	60	-	-
13.....	-	-	-	-	21.4	175x	182	93	101	59	-	-
14.....	-	-	-	-	42.9	189	124	92	95	58	-	-
15.....	-	-	-	-	44.0	190	80	90	88	46.9	-	-
16.....	-	-	-	-	46.3	194	74	89	80	25.8	-	-
17.....	-	-	-	-	42.9	196	81	89	71	1.1	-	-
18.....	-	-	-	-	40.8	200	93	90	71	Nil	-	-
19.....	-	-	-	-	48.7	204	97	90	68	"	-	-
20.....	-	-	-	-	53	197	100	95	65	"	-	-
21.....	-	-	-	-	67	170	103	97	61	"	-	-
22.....	-	-	-	-	81	0.5	105	84	59	"	-	-
23.....	-	-	-	-	104	3.7	96e	69	64	"	-	-
24.....	-	-	-	-	109	68	86e	59	64	"	-	-
25.....	-	-	-	-	115	171	77e	60	55	"	-	-
26.....	-	-	-	-	118	193	67e	43.8	53	"	-	-
27.....	-	-	-	-	144	196	58	0.6	36.0	"	-	-
28.....	-	-	-	-	162	195	59	Nil	32.8	"	-	-
29.....	-	-	-	-	163	182	56	"	30.7	"	-	-
30.....	-	-	-	-	157	180	30.7	"	30.7	"	-	-
31.....	-	-	-	-	155	-	40.8	"	-	"	-	-
Mean	-	-	-	-	58.0	156	124	69.5	40.6	21.7	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	-	-	3,570	9,250	7,610	4,280	2,420	1,330	-	-

The Period..... Discharge: Daily - Maximum 19 June, 204
 (184 days) Instantaneous Maximum 4 p.m., 19 June, 208
 Runoff: Acre-feet 28,460

e - Estimated.

x - Staff gauge readings.

Source: Bow River (via E.I.D. East Branch Canal). Location: Lat. 50° 30', long. 112° 09', in SE. 1/4 sec. 9, tp. 18, rge. 16, W. 4th Mer., Alberta, immediately below headgate on E.I.D. East Branch Canal, about sixteen miles above Lake Newell, and eleven miles west and four miles south of Brooks. Gauge: Staff. Measurement of Discharge: From cableway or by wading. Period of Record: Irrigation seasons 1955 to date; miscellaneous measurements obtained in 1942 and 1943 and published under the title "C.P.R. Bow Slope Canal". Extremes Recorded: Daily - Maximum, 15 June 1958, 464 cfs. Remarks: Records fair.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	-	50e	403	414	308	231	269	-	-
2.....	-	-	-	-		437	424	308	232	269	-	-
3.....	-	-	-	-		452	414	308	234	268	-	-
4.....	-	-	-	-		452	414	308	237	264	-	-
5.....	-	-	-	-	56	452	416	312	238	240	-	-
6.....	-	-	-	-	64	450	412	314	238	235	-	-
7.....	-	-	-	-	64	439	412	314	239	235	-	-
8.....	-	-	-	-	106	426	422	313	239	230	-	-
9.....	-	-	-	-	118	433	422	314	238	230	-	-
10.....	-	-	-	-	118	435	422	313	239	225	-	-
11.....	-	-	-	-	118	435	416	313	239	225	-	-
12.....	-	-	-	-	118	435	422	312	240	225	-	-
13.....	-	-	-	-	118	433	426	316	240	230	-	-
14.....	-	-	-	-	121	433	355	317	240	230	-	-
15.....	-	-	-	-	210	464	331	317	241	200	-	-
16.....	-	-	-	-	242	459	340	306	241	5e	-	-
17.....	-	-	-	-	242	435	340	311	242		-	-
18.....	-	-	-	-	241	418	319	293	241		-	-
19.....	-	-	-	-	241	418	304	307	241		-	-
20.....	-	-	-	-	240	418	316	304	242	Nile	-	-
21.....	-	-	-	-	240	418	316	306	242		-	-
22.....	-	-	-	-	286	416	316	308	242		-	-
23.....	-	-	-	-	318	416	312	302	254		-	-
24.....	-	-	-	-	316	416	304	302	254		-	-
25.....	-	-	-	-	311	416	296	307	256		-	-
26.....	-	-	-	-	308	416	300	307	256	Nil	-	-
27.....	-	-	-	-	304	426	300	307	254		-	-
28.....	-	-	-	-	313	414	296	302	256		-	-
29.....	-	-	-	-	328	424	300	258	256		-	-
30.....	-	-	-	-	365	405	300	259	268		-	-
31.....	-	-	-	-	405	-	306	231	-		-	-
Mean	-	-	-	-	197	430	358	303	244	115	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	-	-	12,120	25,570	21,990	18,640	14,500	7,100	-	-

The Period..... Discharge: Daily - Maximum 15 June, 464
(184 days) Runoff: Acre-feet 99,920

e - Estimated.

Source: Bow River (via E. I. D. East Branch and Bantry canals). Location: Lat. 50° 22' 25", long. 111° 52' 50", in SW, 1/4 sec. 28, tp. 16, rge. 14, W. 4th Mer., Alberta, about five hundred feet below headgate at southeast corner of Lake Newell and thirteen miles south of Brooks. Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: Irrigation seasons, 1955 to date; miscellaneous measurements obtained in 1942 and 1943 and published under the title "C. P. R. Rolling Hills Canal". The recorder was established on 16 May 1957 to replace the former staff gauge. Extremes Recorded: Daily - Maximum, 15 July 1957, 309 cfs; Instantaneous Maximum - 2:30 a.m., 15 July 1957, 313 cfs. Remarks: Records fair.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	-	Nil	285	259x	94e	Nil	44.5	-	-
2.....	-	-	-	-	"	302	250	92e	"	44.5	-	-
3.....	-	-	-	-	"	302	244	91x	"	44.5	-	-
4.....	-	-	-	-	"	293	229	88x	"	44.5	-	-
5.....	-	-	-	-	"	287	221	88x	"	48.6	-	-
6.....	-	-	-	-	"	284	221	87	"	55	-	-
7.....	-	-	-	-	"	278	222	87	"	54	-	-
8.....	-	-	-	-	"	273	230	86	"	55	-	-
9.....	-	-	-	-	"	277x	238	86	"	56	-	-
10.....	-	-	-	-	"	275x	240	88x	"	64	-	-
11.....	-	-	-	-	"	274x	248	92e	Nil	75	-	-
12.....	-	-	-	-	23.7e	275e	255	96x	24.3	76	-	-
13.....	-	-	-	-	50e	276x	235	98	56	82	-	-
14.....	-	-	-	-	50x	265x	210	98	55	84	-	-
15.....	-	-	-	-	50x	218x	200	98	56	87	-	-
16.....	-	-	-	-	50e	249e	179	98	57	53	-	-
17.....	-	-	-	-	50e	250x	153	98	56	9.9	-	-
18.....	-	-	-	-	49.1e	241	140	99	57	3.0	-	-
19.....	-	-	-	-	56e	240	140	99	53	0.5	-	-
20.....	-	-	-	-	72	235	140	98	47.4	Nil	-	-
21.....	-	-	-	-	78	228	140	99	47.4	"	-	-
22.....	-	-	-	-	93	227	138	99	47.4	"	-	-
23.....	-	-	-	-	107	227	138	99	46.2	"	-	-
24.....	-	-	-	-	127	228	133	99	45.6	"	-	-
25.....	-	-	-	-	136	228x	118	99	45.0	"	-	-
26.....	-	-	-	-	168	241x	102	97	45.6	"	-	-
27.....	-	-	-	-	196	289x	101	88	45.6	"	-	-
28.....	-	-	-	-	214	251x	103x	56	45.0	"	-	-
29.....	-	-	-	-	236	254e	100e	8.0	44.5	"	-	-
30.....	-	-	-	-	254	257e	98e	2.5	43.9	"	-	-
31.....	-	-	-	-	276	-	95x	0.1	-	"	-	-
Mean	-	-	-	-	75.3	260	178	84.1	30.6	31.6	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	-	-	4,630	15,490	10,950	5,170	1,820	1,950	-	-

The Period..... Discharge: Daily - Maximum 2 and 3 June, 302
 (184 days) Instantaneous Maximum 4 p.m., 2 June, 304
 Runoff: Acre-feet 40,010

x - Staff gauge readings.

e - Estimated.

Source: Highwood River. Location: Lat. 50° 35' 00", long. 113° 52' 10", in NW. 1/4 sec. 6, tp. 19, rge. 28, W. 4th Mer., Alberta, near headgate in Town of High River. Gauge: Recording. Measurement of Discharge: By wading or from bridge. Period of Record: Periods of varying length 1910 to date; miscellaneous measurements were obtained in 1934 and 1937 but were not published. Records prior to 1955 obtained by staff gauge at present site. Average Discharge: (15 years) - 11.3 cfs. Extremes Recorded: Daily - Maximum, 3 June 1929, 700 cfs (estimated). Revisions: 1943, W.R.P. 117; September 1914 mean discharge has been corrected to 10.8 cfs; runoff for September 1914 and for the year 1914 have been corrected to 643 and 11,845 acre-feet; July 1943 mean discharge has been corrected to 19.1 cfs; summary data as shown for November 1950 in W.R.P. 109 refer to partial month only. Remarks: Records fair. Records for the period March 1910 to May 1923 were collected on "Little Bow Ditch" at High River. The ditch was abandoned in June 1923 and the present canal substituted.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	-	0.2	0.3	0.3	6.2	11.3	7.0	4.0	-
2.....	-	-	-	-	0.2	0.3	0.3	6.0	10.6	7.0	4.8	-
3.....	-	-	-	-	0.2	0.3	0.3	5.4	10.3	7.9	5.4	-
4.....	-	-	-	-	0.2	0.3	0.4	10.2	10.6	8.8	5.6	-
5.....	-	-	-	-	0.2	0.3	0.3	14.6	10.6	9.4	6.0	-
6.....	-	-	-	-	0.2	0.3	0.3	14.2	10.6	10.0	6.0	-
7.....	-	-	-	-	0.2	0.3	0.4	13.8	10.6	11.0	6.2	-
8.....	-	-	-	-	0.2	0.3	0.4	13.1	10.6	11.7	-	-
9.....	-	-	-	-	0.2	0.3	0.3	13.1	10.6	12.4	-	-
10.....	-	-	-	-	0.2	0.3	0.3	12.0	11.0	13.1	-	-
11.....	-	-	-	-	0.3	0.3	0.3	11.7	11.0	13.1	-	-
12.....	-	-	-	-	0.2	0.3	5.6	11.7	10.8e	12.7	-	-
13.....	-	-	-	-	0.2	0.3	8.2	11.3	10.6	12.7	-	-
14.....	-	-	-	-	0.2	0.2	8.5	11.0	11.0e	7.0	-	-
15.....	-	-	-	-	0.2	0.2	8.5	11.0	11.3	2.2	-	-
16.....	-	-	-	-	0.2	0.2	8.2	10.6	10.3x	2.0	-	-
17.....	-	-	-	-	0.3	0.2	8.2	9.1	10.2e	2.0	-	-
18.....	-	-	-	-	0.2	0.2	7.9	7.0	10.0e	2.3	-	-
19.....	-	-	-	-	0.2	0.2	7.9	7.0	9.8e	3.1	-	-
20.....	-	-	-	-	0.2	0.2	7.9	7.3	9.7	3.2	-	-
21.....	-	-	-	-	0.2	0.3	7.6	7.6	9.7e	3.4	-	-
22.....	-	-	-	-	0.2	0.3	7.3	7.6	9.7	3.5	-	-
23.....	-	-	-	-	0.3	0.3	7.9	7.3	9.7	3.7	-	-
24.....	-	-	-	-	0.2	0.3	7.9	7.6	9.4	3.8	-	-
25.....	-	-	-	0.2	0.2	0.3	7.6	8.2	8.8	4.6	-	-
26.....	-	-	-	0.1	0.2	0.3	7.3	10.6	8.8	5.4	-	-
27.....	-	-	-	0.2	0.2	0.3	7.0	13.1	8.8	5.6	-	-
28.....	-	-	-	0.1	0.2	0.3	7.0	13.4	8.2	6.2	-	-
29.....	-	-	-	0.1	0.3	0.3	7.0	13.1	7.3	5.0	-	-
30.....	-	-	-	0.1	0.3	0.3	7.0	12.4	7.0	3.7	-	-
31.....	-	-	-	-	0.3	-	7.0	12.0	-	4.6	-	-
Mean	-	-	-	-	0.22	0.28	5.00	10.3	9.96	6.71	3.35e	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	-	-	13	16	308	633	593	413	200	-

The Period..... Discharge: Daily - Maximum 5 August, 14.6
(214 days) Instantaneous Maximum 4 a.m., 5 August, 15.0
Runoff: Acre-feet 2,180

e - Estimated. x - Staff gauge reading.

MISCELLANEOUS DISCHARGE MEASUREMENTS MADE IN BOW RIVER TRIBUTARY BASIN
FOR THE YEAR 1958

Date	Stream	Location	Discharge cfs
4 June	Eastern Irrigation District Cassil's Syphon	East Branch Canal 5	56
4 June	"	West Branch Canal 4	27.5
26 June	"	"	30.9
26 June	"	East Branch Canal 5	63

ROSS CREEK AT IRVINE - STATION No. 5AH₃

Location: Lat. 49° 57' 20", long. 110° 16' 40", in NE. 1/4 sec. 36, tp. 11, rge. 3, W. 4th Mer., Alberta, at traffic bridge about four miles below confluence with Gros Ventre Creek and about twenty miles above confluence with Seven Persons Creek in Medicine Hat. Drainage Area: 234 square miles (revised). Gauge: Wire-weight. Measurement of Discharge: From bridge or by wading. Period of Record: Part-year records 1910 to 1931 and 1935 to date; miscellaneous measurements in 1909. Extremes Recorded: Daily - Maximum, 9 April 1955, 2,080 cfs, Minimum, Nil at various times; Instantaneous Maximum - 9 April 1955, 3,220 cfs. Revisions: Drainage area, W.R.P. 50; 1942, W.R.P. 117. Remarks: Records fair. Discharge affected by upstream diversions.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	Nil	68	4.6	Nil	-	-	-	-	-	-
2.....	-	-	"	64	4.3	"	-	-	-	-	-	-
3.....	-	-	"	48.4	4.3	"	-	-	-	-	-	-
4.....	-	-	"	49.4	4.1	"	-	-	-	-	-	-
5.....	-	-	"	66	4.6	"	-	-	-	-	-	-
6.....	-	-	"	29.2	4.5	"	-	-	-	-	-	-
7.....	-	-	"	19.2	4.5	"	-	-	-	-	-	-
8.....	-	-	"	15.8	4.5	"	-	-	-	-	-	-
9.....	-	-	"	13.8	4.6	"	-	-	-	-	-	-
10.....	-	-	"	8.8	5.6e	"	-	-	-	-	-	-
11.....	-	-	"	18.2	6.5e	"	-	-	-	-	-	-
12.....	-	-	"	16.6	7.5e	"	-	-	-	-	-	-
13.....	-	-	"	14.6	8.4e	"	-	-	-	-	-	-
14.....	-	-	"	13.8	9.4	"	-	-	-	-	-	-
15.....	-	-	"	13.6	8.4e	"	-	-	-	-	-	-
16.....	-	-	"	10.3	7.3e	"	-	-	-	-	-	-
17.....	-	-	"	11.4	6.2e	"	-	-	-	-	-	-
18.....	-	-	"	9.7	5.1e	"	-	-	-	-	-	-
19.....	-	-	"	8.8	4.0e	"	-	-	-	-	-	-
20.....	-	-	"	9.4	3.0e	"	-	-	-	-	-	-
21.....	-	-	"	8.8	2.0	"	-	-	-	-	-	-
22.....	-	-	"	8.0	1.5	"	-	-	-	-	-	-
23.....	-	-	5.8	6.5	0.4	"	-	-	-	-	-	-
24.....	-	-	2.4	6.1	1.4	"	-	-	-	-	-	-
25.....	-	-	22.1	5.8	Nil	"	-	-	-	-	-	-
26.....	-	-	32.6	5.6	"	"	-	-	-	-	-	-
27.....	-	-	34.0	5.0	"	"	-	-	-	-	-	-
28.....	-	-	110	5.0	"	"	-	-	-	-	-	-
29.....	-	-	158	4.5	"	"	-	-	-	-	-	-
30.....	-	-	166	4.6	"	"	-	-	-	-	-	-
31.....	-	-	174		"	-	-	-	-	-	-	-
Mean	-	-	22.7	19.0	3.76	Nil	-	-	-	-	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	1,400	1,130	231	Nil	-	-	-	-	-	-

The Period..... Discharge: Daily - Maximum 31 March, 174
(122 days) - Minimum at various times, Nil
Mean 11.4
Runoff: Acre-feet 2,760

e - Estimated.

Location: Lat. 49° 53' 20", long. 110° 30' 20", in SW. 1/4 sec. 9, tp. 11, rge. 4, W. 4th Mer., Alberta, about nine miles above confluence with Ross Creek and about twelve miles southeast of Medicine Hat. Drainage Area: 82 square miles (revised). Gauge: Staff. Measurement of Discharge: From bridge or by wading. Period of Record: March to October, 1921 and 1922, and March to June, 1944 to date. Records for 1921 and 1922 were published under the title "at Norton" and for 1944 to 1957 under the title "near Coleridge". Extremes Recorded: Daily - Maximum, 9 April 1955, 829 cfs, Minimum, Nil at various times; Instantaneous Maximum - 9 April 1955, 1,290 cfs. Revisions: 1947, W.R.P. 117. Remarks: Records good during open-water period and fair during ice period. Discharge is affected by minor diversions for irrigation purposes upstream.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	Nil b	52	0.5	0.8	-	-	-	-	-	-
2.....	-	-	"	51	0.6	0.3	-	-	-	-	-	-
3.....	-	-	"	19.7	0.5	0.2	-	-	-	-	-	-
4.....	-	-	"	19.1	0.5	0.2	-	-	-	-	-	-
5.....	-	-	"	24.5	0.4	0.2	-	-	-	-	-	-
6.....	-	-	"	13.5	0.4	0.3	-	-	-	-	-	-
7.....	-	-	"	7.4	0.4	0.3	-	-	-	-	-	-
8.....	-	-	"	4.0	0.4	0.3	-	-	-	-	-	-
9.....	-	-	"	3.2	0.4	0.2	-	-	-	-	-	-
10.....	-	-	"	3.2	0.3	0.1	-	-	-	-	-	-
11.....	-	-	"	3.4	0.3	0.1	-	-	-	-	-	-
12.....	-	-	"	2.8	1.5	0.1	-	-	-	-	-	-
13.....	-	-	"	2.4	1.2	0.1	-	-	-	-	-	-
14.....	-	-	"	2.1	0.8	0.1	-	-	-	-	-	-
15.....	-	-	"	2.0	0.9	0.4	-	-	-	-	-	-
16.....	-	-	"	1.7	0.7	0.3	-	-	-	-	-	-
17.....	-	-	"	1.7	0.5	0.3	-	-	-	-	-	-
18.....	-	-	"	1.8	0.4	0.3	-	-	-	-	-	-
19.....	-	-	"	1.1	0.4	0.3	-	-	-	-	-	-
20.....	-	-	"	1.1	0.3	0.3	-	-	-	-	-	-
21.....	-	-	"	1.0	0.3	0.1	-	-	-	-	-	-
22.....	-	-	"	0.8	0.3	0.1	-	-	-	-	-	-
23.....	-	-	"	0.6	0.2	0.2	-	-	-	-	-	-
24.....	-	-	"	0.6	0.2	0.1	-	-	-	-	-	-
25.....	-	-	"	0.7	0.2	0.1	-	-	-	-	-	-
26.....	-	-	20	0.4	0.1	0.1	-	-	-	-	-	-
27.....	-	-	48	0.6	0.1	0.1	-	-	-	-	-	-
28.....	-	-	64	0.5	0.1	0.1	-	-	-	-	-	-
29.....	-	-	147b	0.6	0.1	0.1	-	-	-	-	-	-
30.....	-	-	152	0.5	0.1	0.1	-	-	-	-	-	-
31.....	-	-	150	-	0.1	-	-	-	-	-	-	-
Mean	-	-	18.7	7.47	0.43	0.21	-	-	-	-	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	1,150	444	26	12	-	-	-	-	-	-

The Period..... Discharge: Daily - Maximum 30 March, 152
 (122 days) - Minimum 1 to 25 March, Nil
 Mean 6.76
 Runoff: Acre-feet, 1,630

b - Ice conditions 1 to 29 March.

RED DEER RIVER NEAR SUNDRE - STATION No. 5CA₁

Location: Lat. 51° 42' 00", long. 114° 51' 20", in NE. 1/4 sec. 36, tp. 31, rge. 7, W. 5th Mer., Alberta, about fifteen miles southwest of Sundre. Drainage Area: 954 square miles (revised). Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: Part-year records 1950 to date. Extremes Recorded: Daily - Maximum, 25 August 1954, 13,960 cfs, Minimum, 1 April 1956, 132 cfs; Instantaneous Maximum - 8 a.m., 25 August 1954, 19,230 cfs. Remarks: Records good during open-water period and fair during ice period.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	173b	235	1,380	2,650	3,180	1,830	846	609	-	-
2.....	-	-	173	245x	1,530	3,200	3,220	1,750	881	596	-	-
3.....	-	-	173x	246	1,480	3,010	2,840	1,610	872	572	-	-
4.....	-	-	174	248	1,470	2,930	2,690	1,640	796	560	-	-
5.....	-	-	175	249x	1,560	2,910	2,480	1,460	746	554	-	-
6.....	-	-	175	290	1,610	2,710	3,530	1,390	716	554	-	-
7.....	-	-	176	330	1,800	2,650	3,390	1,500	708	554	-	-
8.....	-	-	176	371	2,050	2,510	3,250	1,520	738	548	-	-
9.....	-	-	177	459	2,260	2,520	2,880	1,530	771	500	-	-
10.....	-	-	178x	470	2,090	2,560	2,660	1,470	796	511	-	-
11.....	-	-	182	444	1,910	2,380	2,840	1,480	829	511	-	-
12.....	-	-	187x	566	1,910	2,220	2,860	1,470	969	511	-	-
13.....	-	-	183	629	1,640	2,020	2,890	1,410	1,780	506	-	-
14.....	-	-	179	708	1,550	2,110	2,560	1,350	1,660	511	-	-
15.....	-	-	174	779	1,760	2,180	2,320	1,310	1,240	500	-	-
16.....	-	-	170	754	2,190	1,970	2,260	1,310	1,060	495	-	-
17.....	-	-	165	788	2,020x	1,880	2,420	1,310	987	485	-	-
18.....	-	-	161	924	1,710x	2,020	2,260	1,330	942	480	-	-
19.....	-	-	156	1,140b	2,040x	2,080	2,270	1,310	906	480	-	-
20.....	-	-	152	1,590	2,450e	2,320	2,150	1,340	872	475	-	-
21.....	-	-	148	1,520	2,860	2,080	2,110	1,280	812	459	-	-
22.....	-	-	144x	1,480	3,100	1,960	2,120	1,350	779	459	-	-
23.....	-	-	175	1,440	3,390	1,930	2,250	1,230	738	454	-	-
24.....	-	-	207	1,420	3,090	1,920	1,960	1,190	723	409	-	-
25.....	-	-	238x	1,410	3,140	1,840	1,880	1,210	700	384	-	-
26.....	-	-	234x	1,410	3,000	1,930	1,860	1,240	678	404	-	-
27.....	-	-	214	1,410	2,660	1,870	1,930	1,220	656	404	-	-
28.....	-	-	193x	1,410	2,580	2,950	2,040	1,120	643	404	-	-
29.....	-	-	203	1,400	2,730	2,630	1,920	996	643	404	-	-
30.....	-	-	214	1,380	3,240	2,560	1,910	951	622	414	-	-
31.....	-	-	225	-	2,680	-	1,870	863	-	389	-	-
Mean	-	-	182	858	2,222	2,350	2,477	1,354	870	487	-	-
Per sq. mi.	-	-	0.19	0.90	2.33	2.46	2.60	1.42	0.91	0.51	-	-
Acre-feet	-	-	11,210	51,060	136,600	139,800	152,300	83,250	51,790	29,940	-	-

The Period..... Discharge: Daily - Maximum 6 July, 3,530
(245 days) - Minimum 22 March, 144

Instantaneous Maximum at noon, 6 July, 4,050

Mean 1,350; Per Square Mile 1.42

Runoff: Acre-feet 656,000; Depth in inches on drainage area 12.89

b - Ice conditions 1 March to 19 April.

x - Staff gauge readings.

e - Estimated.

Location: Lat. 52° 16' 35", long. 113° 48' 45" (corrected), in SE. 1/4 sec. 20, tp. 38, rge. 27, W. 4th Mer., Alberta, at highway bridge in City of Red Deer. Drainage Area: 4,420 square miles (revised). Gauge: Wire-weight. Measurement of Discharge: From bridge. Period of Record: Periods of varying length, January 1912 to date. Average Discharge: (41 years) - 1,879 cfs. Extremes Recorded: Daily - Maximum, 27 June 1915, 56,000 cfs. Minimum, 7 December 1922, 64 cfs; Instantaneous Maximum - 9:20 p.m., 27 June 1915, 68,250 cfs. Revisions: Drainage area, 1917 Report; 1932, 1943, W.R.P. 117; November 1919 mean discharge has been corrected to 366 cfs; runoff for November 1919 and the water year 1919-20 have been corrected to 21,779 and 1,485,623 acre-feet; October 1924 mean discharge has been corrected to 839 cfs; runoff for October 1925 and for the water year 1924-25 have been corrected to 51,588 and 1,162,719 acre-feet; August 1942 mean discharge has been corrected to 3,240 cfs; February 1943 mean discharge has been corrected to 299 cfs; December 1947 mean discharge has been corrected to 669 cfs. Remarks: Records good during open-water periods and fair during ice period.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	678	864	445	293	286	391	273	1,280	3,180e	4,060e	2,340	1,050e
2.....	670	854	425	300	293	378	260	2,030	3,280	4,460	2,300	975
3.....	670	740	365	282	300	365	282	2,100	3,730	4,780	2,170e	1,000
4.....	766	627	381	305	300	360	386	2,280e	4,050	4,280	2,030e	995
5.....	817	670	425	317	305	392	826	2,460	3,910	4,350	1,900	925
6.....	826e	648	344	329	296	425	1,310	2,810	3,790	4,660e	1,780	839
7.....	836	670	329	310	282	376	1,790	2,880	3,610	4,970	1,710	816e
8.....	817	514	368	391	260	386	3,110	3,320	3,430e	5,640	1,580	793
9.....	774	514	408	386	254	368	7,460	3,650	3,250	4,830	1,500	784
10.....	766	514	360	376	247	349	8,530b	3,730	3,120	4,390	1,560e	848
11.....	758	514	442	391	268	334	8,960	3,460e	3,140	3,930	1,610	868
12.....	758	514	381	414	286	320	8,060	3,190	3,000	3,970	1,570	886
13.....	793e	514	381	436	315	300	7,910e	2,950	3,050	4,320e	1,530	1,020
14.....	829e	490	397	344	324	282	7,760	2,700	2,950	4,680	1,510	1,580e
15.....	864	471	397	349	310	282	7,640	2,420	2,920e	4,240	1,460	2,130
16.....	910	459	397	344	296	282	5,380	2,510	2,880	3,770	1,400	1,780
17.....	873	456	324	339	282	282	4,200	2,560e	2,640	3,540	1,380e	1,640
18.....	845	453	329	349	300	296	3,280	2,620e	2,540	3,750	1,360	1,290
19.....	826	376	397	365	300	310	2,080	2,670e	2,640	3,610	1,340	1,250
20.....	826e	370	436	381	305	315	2,070e	2,720	2,750	3,430e	1,320	1,180
21.....	826	310	408	354	324	310	2,060	2,800	2,700	3,250	1,420	1,110e
22.....	670b	613	389	315	354	310	1,830	3,520	2,630e	3,050	1,350	1,040
23.....	559	694	370	334	372	315	1,660	3,580	2,560	2,900	1,290	1,000
24.....	552	779	402	310	391	320	1,480	3,930	2,430	3,020	1,280e	965
25.....	546	864	378	305	391	345	1,320	3,760e	2,310	2,730	1,270	935
26.....	533	901	354	300	402	305	1,190	3,580	2,260	2,650	1,230	877
27.....	540	641	315	296	402	296	1,100e	3,460	2,250	2,620e	1,370	811
28.....	546	526	324	291	391	296	1,000	3,070	2,370	2,590	1,360	798e
29.....	686	502	329	282	-	286	1,020	2,930	3,020e	2,520	1,290	784
30.....	758	465	334	289	-	284	985	3,120	3,670	2,440	1,210	811
31.....	854	-	286	296	-	282	-	3,070	-	2,400	1,130e	-
Mean	741	584	375	335	316	327	3,174	2,941	3,002	3,736	1,534	1,059
Per sq. mi.	0.17	0.13	0.08	0.08	0.07	0.07	0.72	0.67	0.68	0.85	0.35	0.24
Acre-feet	45,560	34,760	23,050	20,570	17,530	20,120	188,900	180,800	178,600	229,700	94,310	63,030

The Year..... Discharge: Daily - Maximum 11 April, 8,960

- Minimum 10 February, 247

Mean 1,515; Per Square Mile 0.34

Runoff: Acre-feet 1,097,000; Depth in inches on drainage area 4.65

b - Ice conditions 22 October to 10 April. e - Estimated.
Gauge heights from graph of observed readings 7 to 12 April.

Location: Lat. 52° 18', long. 113° 04', in SW. 1/4 sec. 34, tp. 38, rge. 22, W. 4th Mer., Alberta, about two miles southwest of Nevis and fifteen miles west of Stettler and immediately above mouth of Tail Creek which drains Buffalo Lake. Drainage Area: 5,770 square miles (revised). Gauge: Wire-weight. Measurement of Discharge: From bridge. Period of Record: Continuous April 1944 to September 1950; March to October, 1951 to 1958 (discontinued). Average Discharge: (6 years) - 1,884 cfs. Extremes Recorded: Daily - Maximum, 26 August 1954, 44,580 cfs, Minimum, 28 December 1949 to 1 January 1950, 117 cfs; Instantaneous Maximum - 1 a.m., 27 August 1954, 55,040 cfs. Remarks: Records fair.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	450b	338	1,740e	3,250e	4,220	2,400	1,140e	833e	-	-
2.....	-	-	450	326	2,300	3,400	4,600e	2,370	1,020	833	-	-
3.....	-	-	450	314	2,670	3,760	4,980	2,310	1,010	811	-	-
4.....	-	-	450	1,000	2,820	4,170	4,750e	2,300	1,030	784e	-	-
5.....	-	-	450	1,720	2,640	4,180e	4,520	2,060	987	756	-	-
6.....	-	-	452	2,760	2,910e	4,200	4,120	1,950	943	750e	-	-
7.....	-	-	452	4,450	3,180	3,810	5,480	1,860	932	745	-	-
8.....	-	-	452	6,810	3,440	3,690	5,950	1,750	888e	740e	-	-
9.....	-	-	448	8,090	4,080	3,560e	5,620	1,920	844	734	-	-
10.....	-	-	444	11,030	3,470	3,440	4,970e	1,840	778	734e	-	-
11.....	-	-	428	9,310	3,210	3,180	4,320	1,720	767e	734	-	-
12.....	-	-	413	8,400	3,140e	3,100	4,440	1,740e	756	723	-	-
13.....	-	-	402	8,130	3,060	2,950e	4,500	1,760	1,350e	712	-	-
14.....	-	-	392	8,340	2,820	2,800	4,500	1,700	1,940e	706e	-	-
15.....	-	-	388	7,680	2,620	2,850e	4,800	1,640	2,530	701	-	-
16.....	-	-	385	7,030b	2,730	2,900	4,330e	1,570	2,000	701e	-	-
17.....	-	-	385	6,340	2,750	2,860	3,860	1,500	1,820	701	-	-
18.....	-	-	385	4,030	2,800	2,920e	3,860	1,480e	1,500	686e	-	-
19.....	-	-	385	3,360	2,860	2,980e	3,860	1,470	1,350	670	-	-
20.....	-	-	380	2,880	2,900e	3,040	3,510	1,530	1,020e	690	-	-
21.....	-	-	376	2,500e	2,940e	3,100	3,510	1,520e	701	675e	-	-
22.....	-	-	371	2,130	2,980	2,980	3,440e	1,510	1,140	660	-	-
23.....	-	-	371	2,050	3,400	2,920e	3,380	1,460	1,080e	663e	-	-
24.....	-	-	371	1,690	3,600	2,860	3,250	1,480	1,010	667e	-	-
25.....	-	-	371	1,580e	3,330	2,640e	2,990e	1,490e	993e	670	-	-
26.....	-	-	373	1,480	3,260e	2,420	2,730	1,500	976	665e	-	-
27.....	-	-	376	1,410e	3,180	2,650e	2,690	1,500e	954	660	-	-
28.....	-	-	378	1,330e	2,990	2,880	2,640e	1,510	943	660e	-	-
29.....	-	-	385	1,260e	2,800	3,490	2,600	1,500	833	660	-	-
30.....	-	-	392	1,190	2,950e	3,860e	2,510e	1,470	833e	645e	-	-
31.....	-	-	385	-	3,100e	-	2,420	1,260	-	630	-	-
Mean	-	-	406	3,965	2,989	3,228e	3,979	1,712	1,136	710e	-	-
Per sq. mi.	-	-	0.07	0.69	0.52	0.56	0.69	0.30	0.20	0.12	-	-
Acre-feet	-	-	24,970	235,900	183,800	192,100	244,700	105,300	67,570	43,630	-	-

The Period..... Discharge: Daily - Maximum 10 April, 11,030
(245 days) - Minimum 3 April, 314

Mean 2,259; Per Square Mile 0.39

Runoff: Acre-feet 1,098,000; Depth in inches on drainage area 3.57

b - Ice conditions 1 March to 16 April. e - Estimated.
Gauge heights from graph of observed readings 6 to 11 April.

Location: Lat. 50° 57' 50", long. 110° 01' 40", in NE. 1/4 sec. 14, tp. 23, rge. 1, W. 4th Mer., Alberta, at traffic bridge about eight miles above confluence with South Saskatchewan River. Drainage Area: 17,300 square miles (revised). Gauge: Wire-weight. Measurement of Discharge: From ferry cableway about two miles upstream from gauge. Period of Record: Periods of varying length 1917 to 1936 and 1944 to date. Average Discharge: (23 years) - 2,478 cfs. Extremes Recorded: Daily - Maximum, 27 April 1948, 46,170 cfs, Minimum, 24 January 1922, 18 cfs. Revisions: 1935, 1944, 1945, W.R.P. 117; November 1922 mean discharge was published in error in W.R.P. 44 and should be 364 cfs. Remarks: Records fair. Discharge is affected by return flow, from Eastern and Western Irrigation Districts, of water which was originally diverted from the Bow River.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	1,270	1,410	787	292	220	260	1,280	2,300e	3,790	4,180	2,920	1,790
2.....	1,240	1,370	766	292	230	270	1,350		3,770	4,260	3,020	1,780
3.....	1,260	1,360	780	286	230	276	6,450		3,790	4,340	2,900	1,580
4.....	1,220	1,450	801	220	225	281	9,170		3,710	5,000	2,790	1,570
5.....	1,270	1,430	801	220	235	409	8,760		4,690	4,730	2,790	1,450
6.....	1,240	1,410	717	216	240	314	9,600	2,900e	4,300	4,920	2,770	1,340
7.....	1,230	1,310	634	225	240	337	8,290b		4,260	5,880	2,680	1,300
8.....	1,240	1,310	601	230	235	355	8,220		4,580	5,810	2,570	1,300
9.....	1,330	1,390	568	240	240	373	13,540		4,900	5,860	2,480	1,220
10.....	1,430	1,380	562	225	235	403	12,120		4,860	5,810	2,400	1,200
11.....	1,540	1,350	556	225	240	379	12,360	3,410	4,770	5,680	2,330	1,200
12.....	1,480	1,310	549	216	245	367	12,060		4,460	5,480	2,240	1,120
13.....	1,420	1,320	530	216	230	349	11,290		4,260	5,350	2,280	1,040
14.....	1,380	1,360	536	206	225	331	11,120		4,100	5,170	2,230	1,150
15.....	1,370	1,160	497	206	225	320	12,810		4,060	4,820	2,190	1,260
16.....	1,350	1,100	484	202	216	298	10,260	4,100e	4,100	4,750	2,060	1,420
17.....	1,300	1,060	464	198	216	298	9,130		3,960	4,670	1,920	1,790
18.....	1,270	808	452	193	211	292	8,600		3,820	5,020	1,920	2,070
19.....	1,290	614	427	188	198	298	8,260		3,670	5,070	1,970	2,290
20.....	1,270	608	361	180	198	303	3,650		3,560	4,560	2,000	2,520
21.....	1,260	640	403	188	206	308	3,620	3,600e	3,480	4,180	1,990	2,290
22.....	1,310b	654	397	175	211	320	3,690		3,440	4,140	2,040	2,110
23.....	1,060	689	391	171	198	373	3,600		3,370	4,140	1,950	1,840
24.....	1,160	568	373	167	188	458	3,390		3,420	3,940	1,920	1,810
25.....	1,210	601	373	163	180	490	3,150		3,520	3,710	1,900	1,820
26.....	1,260	675	337	163	193	582	3,060	4,600e	3,600	3,630	1,860	1,780
27.....	1,290	682	308	163	211	696	2,990		3,650	3,540	1,820	1,890
28.....	1,310	717	320	167	230	815	2,900		3,710	3,390	1,860	1,630
29.....	1,370	766	308	180	-	882	2,810		3,800	3,200	1,790	1,560
30.....	1,430	710	325	184	-	882	2,570		4,080	3,130	2,070	1,500
31.....	1,420	-	308	206	-	843	-		-	3,080	1,790	-
Mean	1,306	1,040	507	207	220	425	7,003	3,484e	3,983	4,563	2,240	1,621
Per sq. mi.	0.08	0.06	0.03	0.01	0.01	0.02	0.40	0.20	0.23	0.26	0.13	0.09
Acre-feet	80,290	61,910	31,170	12,700	12,200	26,110	416,700	214,200	237,000	280,500	137,800	96,440

The Year..... Discharge: Daily - Maximum 9 April, 13,540

- Minimum 25 to 27 January, 163

Mean 2,220; Per Square Mile 0.13

Runoff: Acre-feet 1,607,000; Depth in inches on drainage area 1.74

b - Ice conditions 22 October to 7 April.

e - Estimated.

KNEEHILLS CREEK NEAR DRUMHELLER - STATION No. 5CE₂

Location: Lat. 51° 29', long. 112° 51', in SE. 1/4 sec. 23, tp. 29, rge. 21, W. 4th Mer., Alberta, about one mile above confluence with Red Deer River. Drainage Area: 950 square miles. Gauge: Wire-weight. Measurement of Discharge: From bridge or by wading. Period of Record: Part-year records 1921 to 1931, 1935 to 1936 and 1957 to date. Records prior to 1957 were obtained in SE. 1/4 sec. 14. Extremes Recorded: Daily - Maximum, 7 April 1925, 2,310 cfs, Minimum, Nil at various times; Instantaneous Maximum - 7 April 1925, 2,560 cfs. Revisions: March 1936 mean discharge was published in error in W.R.P. 82 and should be 107 cfs. Remarks: Records fair.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	-	73	25.8	12.0	1.3	0.0	0.5	-	-
2.....	-	-	-	-	63	16.8	8.5	0.8e	0.1	0.6	-	-
3.....	-	-	-	-	59	15.2	7.5	0.4	0.1	0.4	-	-
4.....	-	-	-	-	68	14.4e	7.2	0.4	0.1e	0.2	-	-
5.....	-	-	-	-	54	13.6	24.4	0.3	0.1e	0.1e	-	-
6.....	-	-	-	-	51	12.0	21.7	0.3	0.0e	0.0	-	-
7.....	-	-	-	-	49.0	10.8	18.5	0.2e	0.0e	0.0	-	-
8.....	-	-	-	-	46.9	9.6	15.6	0.2	0.0e	0.0e	-	-
9.....	-	-	-	-	44.9	9.6	12.8	0.1	0.0	0.0	-	-
10.....	-	-	-	-	40.3	9.2	11.2	0.0	0.0e	0.4e	-	-
11.....	-	-	-	-	38.3	8.9	8.9	0.0	0.1	0.8	-	-
12.....	-	-	-	-	35.4	8.2	9.2	0.1	0.1	0.4e	-	-
13.....	-	-	-	-	32.9	7.5	6.6	0.0	28.6	0.0	-	-
14.....	-	-	-	-	30.0	7.2	6.6	0.0	2.6	0.0	-	-
15.....	-	-	-	-	28.1	6.6	5.0	0.0	2.2	0.1e	-	-
16.....	-	-	-	-	24.8	6.6	5.2	0.0e	1.5	0.2e	-	-
17.....	-	-	-	-	22.6	6.2e	6.9	0.0	1.4	0.3	-	-
18.....	-	-	-	-	19.0	5.7	5.2	0.0	1.4	0.3e	-	-
19.....	-	-	-	-	18.5	20.8	5.0	0.1	1.2e	0.3	-	-
20.....	-	-	-	-	16.8	4.5	4.3e	0.0	1.1e	0.3	-	-
21.....	-	-	-	-	16.0	4.7	3.6	0.1	0.9e	0.6e	-	-
22.....	-	-	-	-	14.4	4.7	3.0	0.0	0.8e	0.8	-	-
23.....	-	-	-	-	14.8	4.0	4.2	0.0	0.6	1.2e	-	-
24.....	-	-	-	-	14.4	3.6	2.8	0.0	0.9	1.5	-	-
25.....	-	-	-	-	12.8	3.0	2.7e	0.0	1.6e	1.3e	-	-
26.....	-	-	-	-	10.4	2.6	2.6	0.1	2.2	1.1e	-	-
27.....	-	-	-	-	10.8	3.2	1.7	0.1	1.1e	0.9	-	-
28.....	-	-	-	-	10.0	24.4	1.6e	0.1e	0.0	1.0e	-	-
29.....	-	-	-	-	9.6	32.4	1.5	0.1	0.0	1b	-	-
30.....	-	-	-	-	17.2	97	1.4e	0.1	0.5	1b	-	-
31.....	-	-	-	-	14.4	-	1.2	0.1e	-	1b	-	-
Mean	-	-	-	-	31.0	13.3	7.37	0.16	1.64e	0.53	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	-	-	1,900	791	453	9.7	98	32	-	-

The Period..... Discharge: Daily - Maximum 30 June, 97
 (184 days) - Minimum at various times, 0.0
 Instantaneous Maximum 30 June, 154 (from high water marks)
 Mean 9.01
 Runoff: Acre-feet 3,280

e - Estimated. b - Ice conditions.
 Gauge heights from graph of observed readings 29 June to 1 July.

Location: Lat. 51° 25', long. 113° 44', in SW. 1/4 sec. 27, tp. 28, rge. 27, W. 4th Mer., Alberta, about one mile below mouth of Carstairs Creek and about thirteen miles east of Crossfield. Drainage Area: 316 square miles. Gauge: Staff. Measurement of Discharge: From bridge or by wading. Period of Record: May to October, 1957 to date. Extremes Recorded: Daily - Maximum, 1 July 1958, 13.5 cfs, Minimum, Nil at various times. Remarks: Records good.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	-	11e	3.7e	13.5	0.1	Nil	Nil	-	-
2.....	-	-	-	-	10e	3.8e	9.7	0.1	"	"	-	-
3.....	-	-	-	-	8.9	3.9	7.1	0.0	"	"	-	-
4.....	-	-	-	-	8.8e	3.6	4.9	0.0	"	"	-	-
5.....	-	-	-	-	8.6	2.7e	4.4	0.0	"	"	-	-
6.....	-	-	-	-	8.3e	1.8e	3.8e	0.0	"	"	-	-
7.....	-	-	-	-	8.0e	0.8	3.1	Nil	"	"	-	-
8.....	-	-	-	-	7.7e	0.3	2.8e	"	"	"	-	-
9.....	-	-	-	-	7.4	0.3	2.6e	"	"	"	-	-
10.....	-	-	-	-	6.9	0.3e	2.3	"	"	"	-	-
11.....	-	-	-	-	6.4e	0.2e	2.1	"	"	"	-	-
12.....	-	-	-	-	5.9	0.2	1.7	"	"	"	-	-
13.....	-	-	-	-	5.6	0.2e	1.5	"	"	"	-	-
14.....	-	-	-	-	5.4	0.1	1.5	"	"	"	-	-
15.....	-	-	-	-	5.1	0.1	1.1	"	"	"	-	-
16.....	-	-	-	-	4.6	0.1	1.4e	"	"	"	-	-
17.....	-	-	-	-	4.1	0.1	1.7	"	"	"	-	-
18.....	-	-	-	-	3.4e	0.1	1.2e	"	"	"	-	-
19.....	-	-	-	-	2.7	0.1	0.8	"	"	"	-	-
20.....	-	-	-	-	2.3	0.1	0.8	"	"	"	-	-
21.....	-	-	-	-	1.9	0.1	0.6e	"	"	"	-	-
22.....	-	-	-	-	1.6e	0.0e	0.4	"	"	"	-	-
23.....	-	-	-	-	1.3	0.0	2.1	"	"	"	-	-
24.....	-	-	-	-	1.3	0.0e	1.1	"	"	"	-	-
25.....	-	-	-	-	1.0e	0.0e	0.5	"	"	"	-	-
26.....	-	-	-	-	0.7	0.0e	0.5	"	"	"	-	-
27.....	-	-	-	-	0.5e	3e	0.3e	"	"	"	-	-
28.....	-	-	-	-	0.3	6e	0.1	"	"	"	-	-
29.....	-	-	-	-	0.2	8.6	0.1e	"	"	"	-	-
30.....	-	-	-	-	1.9e	8.9	0.1	"	"	"	-	-
31.....	-	-	-	-	3.6	-	0.1	"	-	"	-	-
Mean	-	-	-	-	4.69e	1.64e	2.38	0.01	Nil	Nil	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	-	-	288	97	147	0.4	Nil	Nil	-	-

The Period..... Discharge: Daily - Maximum 1 July, 13.5
(184 days) - Minimum at various times, Nil

Mean 1.46

Runoff: Acre-feet 532

e - Estimated.

Location: Lat. 51° 18', long. 113° 00', in NE. 1/4 sec. 10, tp. 27, rge. 22, W. 4th Mer., Alberta, one-half mile below confluence with Serviceberry Creek and about twenty miles above confluence with Red Deer River. Drainage Area: 1,400 square miles (revised). Gauge: Wire-weight. Measurement of Discharge: From bridge or by wading. Period of Record: Mainly May to October, 1951 to date. Extremes Recorded: Daily - Maximum, 30 August 1954, 1,440 cfs, Minimum, 29 and 30 October 1958, 8.8 cfs. Remarks: Records good. Discharge is affected by return flow, from Western Irrigation District, of water originally diverted from Bow River.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	-	59	30.2	132	66	68	62	-	-
2.....	-	-	-	-	59	96	142	75	68	62	-	-
3.....	-	-	-	-	52	134	138	75	66	62	-	-
4.....	-	-	-	-	50	162	138	53	58	62	-	-
5.....	-	-	-	-	48.7	180	134	36.2	60	62	-	-
6.....	-	-	-	-	44.6	185	115	33.1	65	62	-	-
7.....	-	-	-	-	39.6	167	102	43.3	64	62	-	-
8.....	-	-	-	-	37.3	146	92	25.9	64	62	-	-
9.....	-	-	-	-	37.3	123	82	22.0	64	62	-	-
10.....	-	-	-	-	43.3	119	75	19.9	64	58	-	-
11.....	-	-	-	-	59	119	65	19.9	50	44.6	-	-
12.....	-	-	-	-	50	119	78	19.9	34.1	50	-	-
13.....	-	-	-	-	50	127	85	19.9	38.4	37.3	-	-
14.....	-	-	-	-	54	123	85	19.9	54	31.1	-	-
15.....	-	-	-	-	70	113	85	19.9	87	25.9	-	-
16.....	-	-	-	-	75	104	85	19.9	104	22.7	-	-
17.....	-	-	-	-	68	87	87	20.6	104	19.9	-	-
18.....	-	-	-	-	73	78	82	25.1	83	16.0	-	-
19.....	-	-	-	-	73	52	70	22.0	66	15.4	-	-
20.....	-	-	-	-	90	52	52	19.9	66	12.6	-	-
21.....	-	-	-	-	82	37.3	44.6	19.9	66	12.6	-	-
22.....	-	-	-	-	78	36.2	44.6	25.9	66	11.1	-	-
23.....	-	-	-	-	70	43.3	47.3	32.1	66	10.6	-	-
24.....	-	-	-	-	66	58	58	35.1	64	10.6	-	-
25.....	-	-	-	-	57e	43.3	56	45.9	54	10.6	-	-
26.....	-	-	-	-	47.3	28.4	66	60	48.7	10.6	-	-
27.....	-	-	-	-	42.0	31.1	66	60	50	10.1	-	-
28.....	-	-	-	-	60	36.2	65	58	52	9.2	-	-
29.....	-	-	-	-	48.7	65	66	62	62	8.8	-	-
30.....	-	-	-	-	40.8	94	66	62	62	8.8	-	-
31.....	-	-	-	-	39.6	-	66	66	-	9.2	-	-
Mean	-	-	-	-	56.9	93.0	82.9	38.2	63.9	32.4	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	-	-	3,500	5,530	5,100	2,350	3,800	1,990	-	-

The Period..... Discharge: Daily - Maximum 6 June, 185
 (184 days) - Minimum 29 and 30 October, 8.8
 Mean 61.0
 Runoff: Acre-feet 22,270

e - Estimated.

Location: Lat. 50° 51' 30", long. 111° 55' 50", on eastern boundary of sec. 6, tp. 22, rge. 14, W. 4th Mer., Alberta, about six miles above confluence with Red Deer River. Gauge: Staff. Measurement of Discharge: From bridge or by wading. Period of Record: May to October, 1954 to date. Extremes Recorded: Daily - Maximum, 7 August 1954, 1,410 cfs, Minimum, 7 September 1955, 0.0 cfs. Remarks: Records fair. An appreciable proportion of the discharge is return flow, from Eastern Irrigation District, of water originally diverted from Bow River.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	-	8.3e	202	433	172	39.2	92	-	-
2.....	-	-	-	-	8.3	233	427	171e	41.9	86	-	-
3.....	-	-	-	-	6.7	229	427	170e	39.2	86	-	-
4.....	-	-	-	-	7.2	237	292	169e	29.2	88	-	-
5.....	-	-	-	-	7.0	233	217	168e	23.6	90	-	-
6.....	-	-	-	-	5.8	229	205	167e	19.7	92	-	-
7.....	-	-	-	-	6.5	221	202	166	21.6	90	-	-
8.....	-	-	-	-	7.0	237	193	168e	20.6	88	-	-
9.....	-	-	-	-	6.8	229	178	171e	19.7	86	-	-
10.....	-	-	-	-	6.8	233	181	173e	18.8	88	-	-
11.....	-	-	-	-	7.0	221	166	175e	17.2	92	-	-
12.....	-	-	-	-	7.7	213	154	177e	13.2	92	-	-
13.....	-	-	-	-	9.6	205	146	179e	15.0	111	-	-
14.....	-	-	-	-	10.4	217	169	182e	18.0	114	-	-
15.....	-	-	-	-	12.2	229	199	184	32.8	108	-	-
16.....	-	-	-	-	26.9	221	196	187	56	111	-	-
17.....	-	-	-	-	35.3	225	181	190	55	88	-	-
18.....	-	-	-	-	43.3	229	169	196	58	47.5	-	-
19.....	-	-	-	-	40.5	249	163	196	61	31.6	-	-
20.....	-	-	-	-	43.3	257	157	199	85	39.2	-	-
21.....	-	-	-	-	52	265	154	202	92	13.2	-	-
22.....	-	-	-	-	58	297	140	205	100	4.7	-	-
23.....	-	-	-	-	63	312	193	199	96	4.6	-	-
24.....	-	-	-	-	67	307	221	202	111	4.4	-	-
25.....	-	-	-	-	72	317	229	199	114	4.5	-	-
26.....	-	-	-	-	102	302	237	202	120	4.5	-	-
27.....	-	-	-	-	111	287	245	205	117	50	-	-
28.....	-	-	-	-	126	282	257	199	120	59	-	-
29.....	-	-	-	-	129	297	249	152	114	8.3	-	-
30.....	-	-	-	-	137	327	196	134	111	4.0	-	-
31.....	-	-	-	-	184	-	187	83	-	4.4	-	-
Mean	-	-	-	-	45.4	251	218	179e	59.3	60.7	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	-	-	2,790	14,960	13,410	10,990	3,530	3,730	-	-

The Period..... Discharge: Daily - Maximum 1 July, 433
(184 days) - Minimum 30 October, 4.0

Mean 135

Runoff: Acre-feet 49,410

e - Estimated.

Location: Lat. 50° 44' 00", long. 111° 41' 15", in SW. 1/4 sec. 36, tp. 20, rge. 13, W. 4th Mer., Alberta, two miles north of Patricia and about eight miles above confluence with Red Deer River. Gauge: Recording. Measurement of Discharge: From bridge or by wading. Period of Record: Part-year records 1951 to date. Prior to July 1954, records were obtained by staff gauge about one hundred feet upstream. Extremes Recorded: Daily - Maximum, 3 June 1953, 2,170 cfs (estimated), Minimum, 1 to 3 May 1953, 1.9 cfs; Instantaneous Maximum - 3 June 1953, 2,280 cfs (estimated). Remarks: Records fair. An appreciable proportion of the discharge is return flow, from Eastern Irrigation District, of water originally diverted from Bow River.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	-	1.9e	110	179	58	50	33.3	-	-
2.....	-	-	-	-	1.9	142	146	52	42.5	39.5	-	-
3.....	-	-	-	-	1.9	137	128	61e	39.5	38.5	-	-
4.....	-	-	-	-	2.1	122	120	70e	34.1	38.5	-	-
5.....	-	-	-	-	2.2	122	102	80e	31.0	34.9	-	-
6.....	-	-	-	-	2.4	106	102	89e	28.2	35.8	-	-
7.....	-	-	-	-	4.6	106	102	98	24.9	39.5	-	-
8.....	-	-	-	-	6.7	100	96	90	23.0	44.7	-	-
9.....	-	-	-	-	7.5	104	92	87	21.2	48.0	-	-
10.....	-	-	-	-	8.3	106	90	87	20.6	49.2	-	-
11.....	-	-	-	-	10.4	116	75	92	17.8	53	-	-
12.....	-	-	-	-	16.7	118	79	96	16.2	61	-	-
13.....	-	-	-	-	17.3	122	112	87	18.9	84	-	-
14.....	-	-	-	-	15.7	133	116	84	22.4	75	-	-
15.....	-	-	-	-	21.2	151	102	79	24.3	80	-	-
16.....	-	-	-	-	29.6	155	84	80	24.9	112	-	-
17.....	-	-	-	-	28.9	142	89	74	24.9	110	-	-
18.....	-	-	-	-	29.6	140	89	75	25.6	90	-	-
19.....	-	-	-	-	33.3	144	84	77	25.6	79	-	-
20.....	-	-	-	-	31.7	133	85	80	28.9	71	-	-
21.....	-	-	-	-	37.6	126	85	82	29.6	61	-	-
22.....	-	-	-	-	36.7	116	82	84	30.3	57	-	-
23.....	-	-	-	-	48.0	94	108	77	32.5	54	-	-
24.....	-	-	-	-	52	66	110	74	32.5	50	-	-
25.....	-	-	-	-	52	61	104	69	32.5	58	-	-
26.....	-	-	-	-	55	71	100	71	31.7	54	-	-
27.....	-	-	-	-	58	82	96	74	30.3	53	-	-
28.....	-	-	-	-	54	160	98	69	29.6	39.5	-	-
29.....	-	-	-	-	55	274	98	71	29.6	35e	-	-
30.....	-	-	-	-	69	232	77	69	30.3	31e	-	-
31.....	-	-	-	-	75	-	65	59	-	27e	-	-
Mean	-	-	-	-	27.9	126	99.8	77.3	28.4	56.0	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	-	-	1,720	7,520	6,140	4,750	1,690	3,440	-	-

The Period..... Discharge: Daily - Maximum 29 June, 274
 (184 days) - Minimum 1 to 3 May, 1.9
 Instantaneous Maximum at noon, 29 June, 286
 Mean 69.2
 Runoff: Acre-feet 25,260

e - Estimated.

Location: Lat. 50° 47' 50", long. 111° 47' 00", in SE. 1/4 sec. 19, tp. 21, rge. 13, W. 4th Mer., Alberta, about one-half mile below diversion to E.I.D. Imperial Colony Canal, three miles above confluence with Matzhiwin Creek and five miles east and four miles north of Duchess. **Gauge:** Recording. **Measurement of Discharge:** From footbridge or by wading. **Period of Record:** May to October, 1954 to date. **Extremes Recorded:** Daily - Maximum (Regulated), 3 August 1956, 375 cfs (estimated); Minimum (Regulated), 11 to 14 September 1954, 0.0 cfs; Instantaneous Maximum (Regulated) - 8 p.m., 3 August 1956, 660 cfs (estimated). **Remarks:** Records fair. Discharge is mainly return flow, from Eastern Irrigation District system, of water originally diverted from Bow River. Discharge is controlled at Imperial Colony Canal diversion works.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	-	2e	103	142	63	15.7	33.2	-	-
2.....	-	-	-	-	2.0x	108	107	52	13.4	33.2	-	-
3.....	-	-	-	-	2.0	108	89	56	20.4	31.3	-	-
4.....	-	-	-	-	2.0	110	80	55	18.3	47.9	-	-
5.....	-	-	-	-	2.0	104	80	54	17.7	54	-	-
6.....	-	-	-	-	1.8	83	87	41.3	20.9	49.1	-	-
7.....	-	-	-	-	1.8	55	89	40.2		34.1	-	-
8.....	-	-	-	-	1.6	39.2	96	50		31.3	-	-
9.....	-	-	-	-	1.6	35.1	89	43.5	10e	42.1	-	-
10.....	-	-	-	-	1.4	61	79	41.3		33.2	-	-
11.....	-	-	-	-	1.4	97	60	43.5		24.3	-	-
12.....	-	-	-	-	1.4	113	46.8	50		26.9	-	-
13.....	-	-	-	-	45.7	127	47.9	50	20.2	33.2	-	-
14.....	-	-	-	-	50x	132	39.2	55	20.4	29.5	-	-
15.....	-	-	-	-	25.2	135	51	58	15.1	24.3	-	-
16.....	-	-	-	-	54	136	66	72	14.5	21.9	-	-
17.....	-	-	-	-	61	124	63	75	17.7	24.3	-	-
18.....	-	-	-	-	62	124	45.7	74	15.7	33.5	-	-
19.....	-	-	-	-	58	120	36.1	71	23.5	34.4	-	-
20.....	-	-	-	-	58	117	37.1	74	61	16.4	-	-
21.....	-	-	-	-	27.7	111	25.2	79	44.6	15.7	-	-
22.....	-	-	-	-	13.9	97	21.9	78	42.4	15.7	-	-
23.....	-	-	-	-	11.8	94	28.6	83	42.4	21.3	-	-
24.....	-	-	-	-	10.8	85	46.8	87	44.6	-	-	-
25.....	-	-	-	-	13.7	79	47.9	90	40.2	-	-	-
26.....	-	-	-	-	89	70	52	101	39.2	-	-	-
27.....	-	-	-	-	83	63	56	107	34.1	-	-	-
28.....	-	-	-	-	26.9	121	68	111	34.1	10e	-	-
29.....	-	-	-	-	44.6	163	71	113	34.1	-	-	-
30.....	-	-	-	-	92	144	67	91	33.2	-	-	-
31.....	-	-	-	-	82	-	71	43.6	-	-	-	-
Mean	-	-	-	-	30.0	102	64.1	67.8	24.8	25.5	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	-	-	1,850	6,070	3,940	4,170	1,470	1,570	-	-

The Period.....Discharge: Daily - Maximum 29 June, 163
 (184 days) - Minimum 10 to 12 May, 1.4
 Instantaneous Maximum 10 a.m., 29 June, 169
 Mean 52.2
 Runoff: Acre-feet 19,070

e - Estimated.

x - Staff gauge readings 2 to 14 May.

SYLVAN LAKE AT SYLVAN LAKE - STATION No. 5CC₃

Location: Lat. 52° 19', long. 114° 06', in SE. 1/4 sec. 32, tp. 38, rge. 1, W. 5th Mer., Alberta, in town of Sylvan Lake. **Gauge:** Measuring point. **Period of Record:** Occasional observations during 1918 to 1930, 1939, 1940 and 1955 to date. **Extremes Recorded:** Daily - Maximum, 6 July 1955, 79.99 feet, Minimum, 8 September 1939, 75.92 feet. **Remarks:** Elevations are referred to standard iron bench mark, thirty feet north of north edge of black-top highway and about three hundred yards west of west side of Main Street and ninety yards west of west side of West Crescent Street, elevation 3,077.88 feet. Prior to 1958, add 2,994.97 feet to convert to present datum. The following elevations (in feet) were recorded in 1958: 30 April, 3,073.45; 24 June, 3,073.34; 29 July, 3,073.46; 1 September, 3,073.14; 5 September, 3,072.91; 17 October, 3,072.61

SWIFTCURRENT CREEK AT NO. 37 HIGHWAY - STATION No. 5HD₃₆

Location: Lat. 49° 53' 40", long. 108° 27' 10", in NW, 1/4 sec. 7, tp. 11, rge. 18, W. 3rd Mer., Saskatchewan, about twenty miles upstream from Reid Lake (formerly "Duncairn Reservoir") and fourteen miles south of Gull Lake. Drainage Area: 575 square miles. Gauge: Wire-weight. Measurement of Discharge: From bridge or by wading. Period of Record: March to October, 1955 to date. Extremes Recorded: Daily - Maximum, 10 April 1955, 3,010 cfs, Minimum, 1 to 18 March 1956, Nil. Revisions: Drainage area, W.R.P. 121. Remarks: Records fair. Station replaces former station located about eighteen miles downstream and called "Swiftcurrent Creek above Duncairn Reservoir". Peak discharge at this site during the flood of April 1952 was 5,260 cfs as determined by P. F. R. A. Hydrology Division by slope-area method. Discharge is affected by minor diversions for irrigation purposes upstream.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	22b	1,760	38.2	9.6	2.2	0.7	0.1	13.3	-	-
2.....	-	-	22	1,840	38.2	6.2	2.6	0.7	0.1	12.8	-	-
3.....	-	-	22	1,610	37.5	5.9	4.2	0.7	0.1	13.3	-	-
4.....	-	-	22	1,400b	36.1	5.0	6.9	0.8	0.0	12.8	-	-
5.....	-	-	10	1,190	37.5	4.2	9.6	0.7	0.0	12.3	-	-
6.....	-	-	9	807	36.8	3.4	9.2	0.6	0.0	11.8	-	-
7.....	-	-	8	527	35.4	2.6	9.6	0.5	0.0	12.8	-	-
8.....	-	-	8	383	34.0	2.5	10.0	0.5	0.0	13.3	-	-
9.....	-	-	8	291	32.0	1.8	8.8	0.5	0.0	13.8	-	-
10.....	-	-	31	234	29.4	1.5	8.4	0.6	0.0	13.3	-	-
11.....	-	-	19	190	26.2	1.3	9.5e	0.6	0.0	13.3	-	-
12.....	-	-	18	153	25.0	1.1	10.6e	0.7	0.0	14.3	-	-
13.....	-	-	18	128	26.2	0.9	11.7e	0.6	0.0	15.8	-	-
14.....	-	-	18	104	26.8	0.8	12.8	0.5	0.0	18.6	-	-
15.....	-	-	19	94	26.8	0.7	15.3	0.3	0.0	16.4	-	-
16.....	-	-	20	86	24.4	1.0	23.8	0.3	0.0	12.8	-	-
17.....	-	-	21	74	22.6	1.7	20.8	0.2	0.0	12.3	-	-
18.....	-	-	22	68	21.4	1.8	19.7	0.2	0.0	10.9	-	-
19.....	-	-	23	62	17.5	1.9	14.8	0.2	0.0	10.5	-	-
20.....	-	-	24	59	18.0	3.2	9.6	0.1	0.0	9.6	-	-
21.....	-	-	26	52	15.8	2.3	5.6	0.1	0.0	8.8	-	-
22.....	-	-	26	49.9	14.3	3.7	1.9	0.1	0.7	7.6	-	-
23.....	-	-	28	45.3	12.8	2.6	1.3	0.1	2.0	6.9	-	-
24.....	-	-	28	43.1	10.9	2.5	0.7	0.0	2.0	7.3	-	-
25.....	-	-	29	41.7	9.6	3.0	0.7	0.0	3.7	6.9	-	-
26.....	-	-	33	40.3	7.6	2.8	0.7	0.0	4.2	7.3	-	-
27.....	-	-	41	40.3	5.9	3.7	1.1	0.0	4.7	7.3	-	-
28.....	-	-	52	40.3	5.0	3.4	2.5	0.1	6.9	6.2	-	-
29.....	-	-	146	39.6	3.7	2.5	3.4	0.1	8.0	6.2	-	-
30.....	-	-	402	38.9	3.0	2.5	2.5	0.2	8.4	6.9	-	-
31.....	-	-	1,280	-	16.9	-	1.1	0.2	-	7.3	-	-
Mean	-	-	79.2	383	22.4	2.87	7.79	0.35	1.36	11.1	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	4,870	22,790	1,380	171	479	22	81	680	-	-

The Period..... Discharge: Daily - Maximum 2 April, 1,840
 (245 days) - Minimum at various times, 0.0
 Mean 62.7
 Runoff: Acre-feet 30,470

b - Ice conditions 1 March to 4 April. e - Estimated.
 Gauge heights from graph of observed readings 27 March to 3 April.

Location: Lat. 50° 09' 55", long. 107° 53' 50", in SE. 1/4 sec. 18, tp. 14, rge. 14, W. 3rd Mer., Saskatchewan, about two and one-half miles below mouth of Pelletier Creek, nine miles below Reid Lake (formerly "Dunclair Reservoir") and ten miles southwest of Swift Current. Drainage Area: 1,090 square miles (revised). Gauge: Wire-weight. Measurement of Discharge: From bridge or by wading. Period of Record: March to October, 1944 to date. Extremes Recorded: Daily - Maximum (Regulated) 12 April 1952, 5,030 cfs, Minimum (Regulated) 23 August 1952, 0.2 cfs; Instantaneous Maximum (Regulated) - 10 a.m., 11 April 1952, 5,810 cfs. Remarks: Records fair. Stream controlled at Reid Lake.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	24b	1,970b	51	72	54	74	58	30.0	-	-
2.....	-	-	24	2,300	54	71	54	68	55	30.0	-	-
3.....	-	-	17	2,200	48.8	70	56	40.6	53	30.0	-	-
4.....	-	-	18	2,180	53	61	54	37.2	53	27.7	-	-
5.....	-	-	13	2,120	49.7	61	56	39.0	54	27.3e	-	-
6.....	-	-	13	2,090	49.7	60	56	38.1	40.6	26.9	-	-
7.....	-	-	13	1,460	47.9	60	58e	38.6e	57	27.3e	-	-
8.....	-	-	12	790	49.7	62	60	39.0	61	27.7	-	-
9.....	-	-	12	367	47.9	67	54	42.0e	58	27.7e	-	-
10.....	-	-	11	150	48.8	58	40.6	45.0e	59	27.7	-	-
11.....	-	-	11	135	49.7	54	38.1	48.0e	61	28.4	-	-
12.....	-	-	10	123	52	44.2	37.2e	51e	61e	27.7	-	-
13.....	-	-	10	119	51	33.8	36.4	54	61	26.2	-	-
14.....	-	-	9	112	49.7	33.0	35.6	54e	43.6e	26.2e	-	-
15.....	-	-	8	107	49.7	33.0	36.4	54	26.2	26.2	-	-
16.....	-	-	8	97	49.7	31.5	34.7	54e	27.7	26.2	-	-
17.....	-	-	9	97	49.7	31.5	33.8	53e	27.7	24.7	-	-
18.....	-	-	10	95	49.7	31.5e	33.0	53	27.7	24.7	-	-
19.....	-	-	11	92	48.8	31.5	32.2	54e	27.7	24.1	-	-
20.....	-	-	12	89	51	30.0	31.5	56	30.7	24.1e	-	-
21.....	-	-	13	89	53	34.7	33.0	57	28.4	24.1	-	-
22.....	-	-	15	74	51	33.1e	34.7	57e	26.9	23.4e	-	-
23.....	-	-	19	64	51	31.5	35.8e	57e	29.2	22.7	-	-
24.....	-	-	25	62	52e	33.0	37.0e	57e	29.2	21.4	-	-
25.....	-	-	38	59	53	49.7	38.1	56e	29.2	22.0	-	-
26.....	-	-	82	55	58	57	40.6	56	29.2e	21.7e	-	-
27.....	-	-	100	54	58	56	42.4	60	29.2	21.4	-	-
28.....	-	-	144	53	64	54	40.6	58e	30.0	21.4	-	-
29.....	-	-	196	54	71	54e	49.0e	55	30.7	20.0	-	-
30.....	-	-	277	54	71	53	57e	60	30.7	19.4	-	-
31.....	-	-	779	-	72	-	66e	64	-	18.7	-	-
Mean	-	-	62.7	577	53.4	48.4	44.1	52.6e	41.2	25.1	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	3,850	34,340	3,280	2,880	2,710	3,230	2,450	1,540	-	-

The Period..... Discharge: Daily - Maximum 2 April, 2,300
(245 days) - Minimum 15 and 16 March, 8

Mean 112

Runoff: Acre-feet 54,280

b - Ice conditions 1 March to 1 April.

e - Estimated.

Location: Lat. 50° 16' 50", long. 107° 46' 40", in SE. 1/4 sec. 30, tp. 15, rge. 13, W. 3rd Mer., Saskatchewan, at Chaplin Street crossing in Swift Current, about twenty miles below Reid Lake (formerly "Dun Cairn Reservoir") and forty miles by stream above confluence with South Saskatchewan River. **Drainage Area:** 1,240 square miles (revised). **Gauge:** Wire-weight. **Measurement of Discharge:** From bridge or by wading. **Period of Record:** Continuous August 1926 to April 1931; mainly March to October, 1933 to 1940 and 1944 to date. Records for 1944 and 1945 obtained at City Reservoir about one and one-half miles upstream and other records prior to 1954 at a site about one-half mile upstream. **Extremes Recorded:** Daily - Maximum (Regulated), 12 April 1952, 5,880 cfs, Minimum, Nil at various times. **Remarks:** Records good during open-water period and fair during ice period. Stream controlled at Reid Lake since March 1942. A number of other stations have been operated in the vicinity at various times and published under various names. These former stations are as follows: "at Swift Current" - seasons 1910 to 1913, one-half mile downstream; "near Swift Current - Lower Station" - seasons 1913 to 1916, about one and one-half miles upstream; "near Swift Current - Upper Station" - 1914 to 1926, about three miles upstream.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	66b	1,500b	57	35.0	12.8	49.4	19.8	40.6	-	-
2.....	-	-	44	2,390	60	47.9	13.7	55	18.7	44.9	-	-
3.....	-	-	44	2,230	58	47.9	13.7	29.6	10.3	44.9	-	-
4.....	-	-	43	2,080	60	43.4	15.6	27.0	11.9	42.0	-	-
5.....	-	-	34	2,030	65	42.0	16.6	27.0	11.9	36.4	-	-
6.....	-	-	35	1,990	69	43.4	15.6	28.3	12.8	35.0	-	-
7.....	-	-	35	1,910	65	40.6	14.6	36.4	16.6	36.4	-	-
8.....	-	-	32	869	55	37.8	15.6	37.8	17.6	36.4	-	-
9.....	-	-	32	244	57	37.8	10.3	37.8	16.6	36.4	-	-
10.....	-	-	30	104	68	35.0	10.3	37.8	16.6	36.4	-	-
11.....	-	-	30	58	65	30.9	8.8	32.2	17.6	35.0	-	-
12.....	-	-	30	55	66	14.6	7.4	25.7	28.3	36.4	-	-
13.....	-	-	25	46.4	65	2.9	11.9	24.5	42.0	35.0	-	-
14.....	-	-	18	43.4	63	3.3	19.8	18.7	37.8	33.6	-	-
15.....	-	-	12	28.3	44.9	6.8	23.3	22.1	33.6	33.6	-	-
16.....	-	-	12	33.6	10.3	9.5	20.9	22.1	24.5	32.2	-	-
17.....	-	-	12	29.6	11.9	10.3	18.7	22.1	17.6	32.2	-	-
18.....	-	-	19	4.1	13.7	8.8	17.6	24.5	17.6	30.9	-	-
19.....	-	-	20	3.3	15.6	7.4	17.6	27.0	40.6	32.2	-	-
20.....	-	-	41	2.0	16.6	5.1	17.6	7.4	44.9	35.0	-	-
21.....	-	-	32	16.6	18.7	8.1	17.6	69	43.4	32.2	-	-
22.....	-	-	32	19.8	23.3	8.8	17.6	58	35.0	30.9	-	-
23.....	-	-	34	14.6	23.3	9.5	16.6	55	35.0	30.9	-	-
24.....	-	-	64	12.8	20.9	9.5	15.6	52	33.6	32.2	-	-
25.....	-	-	83	12.8	23.3	10.3	17.6	51	32.2	33.6	-	-
26.....	-	-	190	14.6	23.3	10.3	17.6	51	29.6	32.2	-	-
27.....	-	-	456	8.8	24.5	11.9	17.6	52	30.9	28.3	-	-
28.....	-	-	402	19.8	24.5	11.9	17.6	52	25.7	27.0	-	-
29.....	-	-	629	23.3	29.6	11.9	19.8	55	30.9	27.0	-	-
30.....	-	-	824	32.2	29.6	11.9	57	54	36.4	25.7	-	-
31.....	-	-	1,760	-	27.0	-	47.9	46.4	-	25.7	-	-
Mean	-	-	165	528	40.5	20.5	18.2	40.5	26.3	33.9	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	10,160	31,390	2,490	1,220	1,120	2,490	1,570	2,090	-	-

The Period..... Discharge: Daily - Maximum 2 April, 2,390
 (245 days) - Minimum 20 April, 2.0
 Instantaneous Maximum 12:45 p.m., 2 April, 2,680
 Mean 108

Runoff: Acre-feet 52,530

b - Ice conditions 1 March to 1 April.

Gauge heights from graph of observed readings 25 to 31 March and from P.F.R.A. recorder charts 1 to 9 April.

Source: Swiftcurrent Creek. Location: Lat. 50° 17' 40", long. 107° 44' 40", in NW. 1/4 sec. 28, tp. 15, rge. 13, W. 3rd Mer., Saskatchewan, about two miles below headgate and one and one-half miles northeast of Chaplin Street bridge over Swiftcurrent Creek. Gauge: Recording. Measurement of Discharge: From bridge or by wading. Period of Record: Irrigation seasons, 1946 to 1948 and 1951 to date; miscellaneous measurements in 1945, 1949 and 1950. Prior to 1955 records were obtained by staff gauge about one and three-quarters miles upstream. Extremes Recorded: Daily - Maximum, 21 July 1957, 75 cfs. Remarks: Records fair. Water is diverted from the canal to the Dominion Experimental Farm through a Parshall flume above the present station. Records at the present site are adjusted to include this diversion.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	1b	38.0	16.7	23.5	27.3e	18.0	42.0	Nil	-	-
2.....	-	-	0.5	90	12.3	16.1	31.5	22.9	43.6	"	-	-
3.....	-	-	0.5	81	12.0	13.8	29.1	13.9	50	"	-	-
4.....	-	-	0.5	78	6.0e	13.9	29.1	11.6	46.9	"	-	-
5.....	-	-		78	Nil	13.1	29.4	8.6	47.4	"	-	-
6.....	-	-		77	"	13.8	28.6	9.1	46.9	"	-	-
7.....	-	-		89	"	13.6	28.7	8.4	46.0	"	-	-
8.....	-	-		99	"	13.6	30.0	6.0	45.2	"	-	-
9.....	-	-		101	"	13.4	24.6	10.9	48.9	"	-	-
10.....	-	-		94	"	12.6	18.1	19.3	53	"	-	-
11.....	-	-		98	"	10.4	16.8	19.7	50	"	-	-
12.....	-	-		100	"	10.5	16.8	26.7	30.4	"	-	-
13.....	-	-		100	"	17.3	18.0	31.9	21.0	"	-	-
14.....	-	-	0.5	96	"	14.3	19.5	35.6	21.0	"	-	-
15.....	-	-		93	"	14.3	17.1	41.5	15.1	"	-	-
16.....	-	-		93	10.6	14.4	12.5	35.0	3.8	"	-	-
17.....	-	-		92	38.4	13.7	13.1	36.4	0.9	"	-	-
18.....	-	-		89	34.4e	14.0	11.4	37.8	0.8	"	-	-
19.....	-	-		87	30.4e	14.9	12.1	22.9	0.5	"	-	-
20.....	-	-		81	26.4	16.5	12.3	1.8	0.4	"	-	-
21.....	-	-		60	25.5	16.1	11.2	1.1	0.4	"	-	-
22.....	-	-		60	25.5	15.9	10.8	6.7	0.3	"	-	-
23.....	-	-		60	26.6	17.0	11.5	4.3	0.5	"	-	-
24.....	-	-	1	48.2	27.0	17.8	11.4	3.9	0.3	"	-	-
25.....	-	-	5	42.4	26.8	16.1	11.4	1.7	0.1	"	-	-
26.....	-	-	10	42.8	28.5	20.2	12.0	21.6	0.0	"	-	-
27.....	-	-	8	38.4	27.7	25.3	11.2	34.3	Nil	"	-	-
28.....	-	-	12	33.5	27.7	29.4	10.4	44.8	0.0	"	-	-
29.....	-	-	16	33.2	28.2	28.9	10.5	46.0	Nil	"	-	-
30.....	-	-	12	28.0	26.6	28.9	12.8	46.9	Nil	"	-	-
31.....	-	-	12b	-	26.2	-	16.5	46.0	-	"	-	-
Mean	-	-	2.84	73.4	15.6	16.8	17.9	21.8	20.5	Nil	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	175	4,360	957	998	1,100	1,340	1,220	Nil	-	-

The Period..... Discharge: Daily Maximum 9 April, 101
(245 days) Runoff: Acre-feet 10,150

b - Ice conditions 1 to 31 March.

e - Estimated.

1958 data includes water diverted by Dominion Experimental Farm through Parshall flume above gauging station. During 1958 an additional estimated 43 acre-feet was pumped from the canal above the gauging station and is not included in the discharges shown.

Location: Lat. 50° 00' 35", long. 107° 56' 00", in SW. 1/4 sec. 24, tp. 12, rge. 15, W. 3rd Mer., Saskatchewan, at north end of lake on outlet structure to Pelletier Creek and about ten miles above confluence of Pelletier and Swiftcurrent creeks. Gauge: Staff. Period of Record: Mainly March to October, 1944 to date. Extremes Recorded: Daily - Maximum (Regulated), 13 and 25 April 1955, 97.39 feet, Minimum (Regulated), 23 October 1956, 93.44 feet. Remarks: Gauge heights are referred to standard iron bench mark about one hundred and fifty feet west of gauge and three feet south of fence, gauge height 101.12 feet. Elevation controlled at dam and outlet structure at north end of lake. Daily gauge heights for the years 1950 to 1955 are included in this paper.

Daily Gauge Heights in Feet for Calendar Years 1950 and 1951

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1950												
1.....	-	-	-	-	-	-	-	-	-	-	-	-
2.....	-	-	-	-	-	-	-	-	-	-	-	-
3.....	-	-	-	-	95.76	-	-	-	-	-	-	-
4.....	-	-	-	-	-	-	-	95.44	-	-	-	-
5.....	-	-	-	-	-	-	-	-	-	-	-	-
6.....	-	-	-	-	-	-	-	-	-	-	-	-
7.....	-	-	-	-	-	-	93.76	-	-	-	-	-
8.....	-	-	-	-	-	-	-	-	-	-	-	-
9.....	-	-	-	-	-	95.82	-	-	-	-	-	-
10.....	-	-	-	-	-	-	-	-	-	-	-	-
11.....	-	-	-	-	-	-	-	95.44	-	-	-	-
12.....	-	-	-	-	-	-	-	-	-	-	-	-
13.....	-	-	-	-	-	-	-	-	-	-	-	-
14.....	-	-	-	-	-	-	94.75	-	-	-	-	-
15.....	-	-	-	-	-	-	-	-	-	-	-	-
16.....	-	-	-	-	-	95.82	-	-	-	-	-	-
17.....	-	-	-	-	-	-	-	-	95.23	-	-	-
18.....	-	-	-	-	-	-	-	-	-	-	-	-
19.....	-	-	-	-	-	-	-	95.42	-	95.13	-	-
20.....	-	-	-	95.68	-	95.79	-	95.35	-	-	-	-
21.....	-	-	-	-	-	-	95.55	-	-	-	-	-
22.....	-	-	-	-	-	-	95.49	-	-	-	-	-
23.....	-	-	-	-	-	95.85	-	-	-	-	-	-
24.....	-	-	-	-	-	-	-	-	-	-	-	-
25.....	-	-	-	-	95.84	-	-	-	-	-	-	-
26.....	-	-	-	-	-	-	-	-	-	-	-	-
27.....	-	-	-	-	-	-	-	-	-	-	-	-
28.....	-	-	-	-	-	-	-	-	-	-	-	-
29.....	-	-	-	-	-	-	95.44	-	-	-	-	-
30.....	-	-	-	-	-	95.68	-	-	-	-	-	-
31.....	-	-	-	-	-	-	-	-	-	-	-	-
1951												
1.....	-	-	-	-	-	-	-	-	-	-	-	-
2.....	-	-	-	-	-	-	-	-	-	-	-	-
3.....	-	-	-	-	-	-	-	96.38	-	-	-	-
4.....	-	-	-	-	-	-	-	-	-	-	-	-
5.....	-	-	-	-	-	-	-	-	-	-	-	-
6.....	-	-	-	-	-	-	-	-	-	-	-	-
7.....	-	-	-	-	-	96.51	96.66	-	-	-	-	-
8.....	-	-	-	-	-	-	-	-	96.45	-	-	-
9.....	-	-	-	-	-	-	-	-	-	-	-	-
10.....	-	-	-	-	-	-	-	96.27	-	-	-	-
11.....	-	-	-	-	-	-	-	-	-	-	-	-
12.....	-	-	-	-	97.35	-	-	-	-	-	-	-
13.....	-	-	-	-	-	-	96.62	-	-	-	-	-
14.....	-	-	-	-	-	-	-	-	-	-	-	-
15.....	-	-	-	-	-	96.57	-	-	-	-	-	-
16.....	-	-	-	-	-	-	-	-	-	-	-	-
17.....	-	-	-	-	-	-	-	96.22	-	-	-	-
18.....	-	-	-	-	-	-	-	-	-	-	-	-
19.....	-	-	-	-	-	-	-	-	-	-	-	-
20.....	-	-	-	-	-	-	96.57	-	-	-	-	-
21.....	-	-	-	-	-	-	-	-	-	-	-	-
22.....	-	-	-	-	-	96.66	-	-	-	-	-	-
23.....	-	-	-	-	-	-	-	-	-	-	-	-
24.....	-	-	-	-	96.83	-	-	96.16	-	-	-	-
25.....	-	-	-	-	-	-	96.46	-	-	96.32	-	-
26.....	-	-	-	-	-	-	-	-	-	-	-	-
27.....	-	-	-	-	-	-	-	-	-	-	-	-
28.....	-	-	-	-	-	-	96.44	-	-	-	-	-
29.....	-	-	-	-	-	96.71	-	-	-	-	-	-
30.....	-	-	-	-	-	-	-	-	-	-	-	-
31.....	-	-	-	-	96.51	-	-	-	-	-	-	-

Daily Gauge Heights in Feet for Calendar Years 1952 and 1953

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1952												
1.....	-	-	-	-	-	-	-	96.43	-	-	-	-
2.....	-	-	-	-	-	-	-	-	-	-	-	-
3.....	-	-	-	-	-	-	-	-	-	-	-	-
4.....	-	-	-	-	-	-	-	-	-	-	-	-
5.....	-	-	-	-	-	-	96.53	-	-	-	-	-
6.....	-	-	-	-	-	-	-	-	-	-	-	-
7.....	-	-	-	-	-	96.52	-	-	-	-	-	-
8.....	-	-	-	-	-	-	-	96.45	-	-	-	-
9.....	-	-	-	-	-	-	-	-	-	-	-	-
10.....	-	-	-	-	-	-	-	-	-	-	-	-
11.....	-	-	-	-	-	-	96.52	-	-	-	-	-
12.....	-	-	-	-	-	-	-	-	-	-	-	-
13.....	-	-	-	-	-	-	-	-	-	-	-	-
14.....	-	-	-	-	-	96.39	-	-	-	-	-	-
15.....	-	-	-	-	-	-	-	-	-	-	-	-
16.....	-	-	-	-	-	-	-	96.36	-	-	-	-
17.....	-	-	-	-	-	-	-	-	-	-	-	-
18.....	-	-	-	-	-	-	-	-	-	-	-	-
19.....	-	-	-	-	-	-	-	-	-	-	-	-
20.....	-	-	-	-	-	96.40	96.46	-	-	-	-	-
21.....	-	-	-	-	-	-	-	-	-	-	-	-
22.....	-	-	-	-	-	-	-	-	-	-	-	-
23.....	-	-	-	-	-	96.42	-	-	-	-	-	-
24.....	-	-	-	-	-	-	-	-	-	-	-	-
25.....	-	-	-	-	-	-	-	-	-	-	-	-
26.....	-	-	-	-	-	-	96.44	-	-	-	-	-
27.....	-	-	-	-	-	96.52	-	-	96.12	-	-	-
28.....	-	-	-	-	-	-	-	-	-	-	-	-
29.....	-	-	-	-	-	-	-	-	-	-	-	-
30.....	-	-	-	-	-	-	-	-	-	-	-	-
31.....	-	-	-	-	-	-	-	-	-	-	-	-
1953												
1.....	-	-	-	96.60	96.85	-	-	-	-	-	-	-
2.....	-	-	-	-	-	-	-	-	-	94.07	-	-
3.....	-	-	-	-	-	-	96.76	-	-	-	-	-
4.....	-	-	-	-	-	-	-	-	94.76	-	-	-
5.....	-	-	-	-	-	97.14	-	95.76	-	-	-	-
6.....	-	-	-	-	-	-	-	-	-	94.13	-	-
7.....	-	-	-	-	-	-	-	95.75	-	94.13	-	-
8.....	-	-	-	-	96.84	-	-	-	-	-	-	-
9.....	-	-	-	-	-	-	-	-	-	94.06	-	-
10.....	-	-	-	-	-	-	96.64	-	-	-	-	-
11.....	-	-	-	96.61	-	-	-	-	94.75	-	-	-
12.....	-	-	-	-	-	97.03	-	-	-	-	-	-
13.....	-	-	-	-	-	-	-	-	-	-	-	-
14.....	-	-	-	-	-	-	-	-	-	-	-	-
15.....	-	-	-	-	96.83	-	-	95.74	-	94.07	-	-
16.....	-	-	-	-	-	-	-	-	-	-	-	-
17.....	-	-	-	-	-	-	96.46	-	-	-	-	-
18.....	-	-	95.26	-	-	-	-	-	94.48	-	-	-
19.....	-	-	-	-	-	96.86	-	-	-	-	-	-
20.....	-	-	-	-	-	-	-	-	-	-	-	-
21.....	-	-	-	-	-	-	-	95.43	-	-	-	-
22.....	-	-	-	96.61	96.84	-	-	-	-	-	-	-
23.....	-	-	-	-	-	-	-	-	-	94.07	-	-
24.....	-	-	-	-	-	-	96.16	-	-	-	-	-
25.....	-	-	-	-	-	-	-	-	94.17	-	-	-
26.....	-	-	95.39	-	-	96.86	-	-	-	-	-	-
27.....	-	-	-	-	-	-	-	-	-	-	-	-
28.....	-	-	95.80	-	-	-	-	94.77	-	-	-	-
29.....	-	-	-	-	96.84	-	-	-	-	-	-	-
30.....	-	-	-	-	-	-	-	-	-	94.05	-	-
31.....	-	-	-	-	-	-	95.86	-	-	94.10	-	-

Daily Gauge Heights in Feet for Calendar Years 1954 and 1955

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1954												
1.....	-	-	-	-	-	96.45	-	-	-	-	-	-
2.....	-	-	-	-	-	96.47	-	96.16	-	-	-	-
3.....	-	-	-	-	-	-	-	-	-	-	-	-
4.....	-	-	-	-	-	-	-	-	-	96.18	-	-
5.....	-	-	-	-	-	-	96.26	-	-	-	-	-
6.....	-	-	-	-	-	-	-	-	96.18	-	-	-
7.....	-	-	-	-	-	96.45	-	-	-	-	-	-
8.....	-	-	-	-	-	-	-	-	-	-	-	-
9.....	-	-	-	95.54	-	-	-	-	-	-	-	-
10.....	-	-	-	-	-	-	-	96.21	-	-	-	-
11.....	-	-	-	-	-	-	-	-	-	-	-	-
12.....	-	-	-	-	-	-	96.35	-	-	96.24	-	-
13.....	-	-	-	96.04	-	-	-	-	96.15	-	-	-
14.....	-	-	-	-	-	96.66	-	-	-	-	-	-
15.....	-	-	-	96.04	-	-	-	-	-	-	-	-
16.....	-	-	-	-	-	-	-	-	-	-	-	-
17.....	-	-	-	95.94	-	-	-	96.21	-	96.26	-	-
18.....	-	-	-	-	-	-	-	-	-	-	-	-
19.....	-	-	-	-	-	-	96.31	-	-	-	-	-
20.....	-	-	-	-	-	96.45	-	-	-	96.23	-	-
21.....	-	-	-	-	-	-	-	-	-	-	-	-
22.....	-	-	-	-	-	-	-	96.21	-	-	-	-
23.....	-	-	-	-	-	-	-	-	96.26	-	-	-
24.....	-	-	-	-	-	-	-	-	-	-	-	-
25.....	-	-	-	-	-	-	-	-	-	-	-	-
26.....	-	-	-	-	-	-	96.21	-	-	-	-	-
27.....	-	-	-	-	-	-	96.19	-	-	-	-	-
28.....	-	-	-	-	-	96.03	-	-	96.13	96.16	-	-
29.....	-	-	-	-	-	-	-	-	-	-	-	-
30.....	-	-	-	-	-	-	-	96.17	-	-	-	-
31.....	-	-	-	-	-	-	-	-	-	-	-	-
1955												
1.....	-	-	-	-	-	-	-	96.32	-	-	-	-
2.....	-	-	-	-	97.25	-	-	-	95.92	-	-	-
3.....	-	-	-	-	-	-	-	-	-	95.60	-	-
4.....	-	-	-	-	-	-	96.16	-	-	-	-	-
5.....	-	-	-	-	-	-	-	-	-	-	-	-
6.....	-	-	-	-	-	96.37	-	-	-	-	-	-
7.....	-	-	-	-	-	-	-	-	-	-	-	-
8.....	-	-	-	-	-	-	-	-	-	-	-	-
9.....	-	-	-	97.21	97.15	-	-	96.30	95.67	95.55	-	-
10.....	-	-	-	-	-	-	-	-	-	-	-	-
11.....	-	-	-	97.35	-	-	-	-	-	-	-	-
12.....	-	-	-	-	-	-	-	-	-	-	-	-
13.....	-	-	-	97.38	-	-	-	-	-	-	-	-
14.....	-	-	-	-	-	-	96.45	-	-	-	-	-
15.....	-	-	-	-	-	-	-	96.22	95.43	-	-	-
16.....	-	-	-	97.37	-	96.28	-	-	-	95.52	-	-
17.....	-	-	-	-	97.03	-	-	-	-	-	-	-
18.....	-	-	-	97.37	96.88	96.15	-	-	-	-	-	-
19.....	-	-	-	-	-	-	-	-	-	-	-	-
20.....	-	-	-	-	-	95.74	-	-	-	-	-	-
21.....	-	-	-	-	-	-	96.42	96.10	-	-	-	-
22.....	-	-	-	-	-	-	-	-	95.32	-	-	-
23.....	-	-	-	-	97.01	-	-	-	-	-	-	-
24.....	-	-	-	-	-	-	-	96.04	-	95.50	-	-
25.....	-	-	-	97.38	-	-	-	-	-	-	-	-
26.....	-	-	-	-	-	-	96.34	-	95.40	95.50	-	-
27.....	-	-	-	-	-	96.15	-	-	-	-	-	-
28.....	-	-	-	-	-	-	-	-	-	-	-	-
29.....	-	-	-	-	-	-	-	-	-	-	-	-
30.....	-	-	-	97.25	96.59	-	-	-	-	-	-	-
31.....	-	-	-	-	-	-	96.35	-	-	95.44	-	-

Daily Gauge Heights in Feet for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	95.38	-	-	-	-	-	-	-	-	-
2.....	-	-	-	96.52	-	-	96.19	95.83	-	-	-	-
3.....	-	-	-	-	-	-	-	-	-	-	-	-
4.....	-	-	-	-	96.67	-	96.14	-	95.53	-	-	-
5.....	-	-	95.41	96.58	-	-	-	95.81	-	95.24	-	-
6.....	-	-	-	-	-	-	-	-	-	-	-	-
7.....	-	-	-	-	-	-	-	-	95.47	-	-	-
8.....	-	-	95.38	-	-	-	-	-	-	-	-	-
9.....	-	-	-	-	-	-	-	95.73	-	-	-	-
10.....	-	-	-	-	-	96.42	-	-	-	-	-	-
11.....	-	-	-	-	96.67	-	-	-	-	-	-	-
12.....	-	-	-	96.64	-	-	96.08	-	-	95.23	-	-
13.....	-	-	-	96.65	-	-	-	-	-	-	-	-
14.....	-	-	-	-	-	-	-	-	95.41	-	-	-
15.....	-	-	95.38	-	-	-	-	-	-	-	-	-
16.....	-	-	-	-	-	96.33	-	95.63	-	-	-	-
17.....	-	-	-	-	-	-	-	-	-	-	-	-
18.....	-	-	-	-	96.67	-	-	-	-	95.22	-	-
19.....	-	-	-	96.67	-	-	96.07	-	-	-	-	-
20.....	-	-	-	-	-	-	-	-	95.33	-	-	-
21.....	-	-	-	-	96.56	-	-	-	-	-	-	-
22.....	-	-	95.38	-	-	-	-	-	-	-	-	-
23.....	-	-	-	-	-	96.32	-	95.52	-	-	-	-
24.....	-	-	-	-	-	-	-	-	-	-	-	-
25.....	-	-	-	-	-	-	-	-	95.32	95.24	-	-
26.....	-	-	-	96.66	-	-	-	-	-	-	-	-
27.....	-	-	-	-	-	-	-	-	95.29	-	-	-
28.....	-	-	-	96.67	96.53	96.32	95.93	-	-	95.23	-	-
29.....	-	-	95.70	-	-	-	-	-	-	-	-	-
30.....	-	-	-	-	-	-	-	95.53	-	-	-	-
31.....	-	-	-	-	96.48	-	-	-	-	95.24	-	-

Location: Lat. 50° 04' 30", long. 108° 03' 00", in NW. 1/4 sec. 7, tp. 13, rge. 15, W. 3rd Mer., Saskatchewan, on Swiftcurrent Creek about seven miles above confluence with Pelletier Creek, one mile west of Duncairn and about eighteen miles southwest of Swift Current. Gauge: Staff. Period of Record: Mainly March to October, 1945 to date. Prior to 1958, records were published under the title "Duncairn Reservoir near Duncairn". Extremes Recorded: Daily - Maximum (Regulated), 20 and 21 April 1952, 2,652.91 feet, Minimum (Regulated), 7 March 1953, 2,627.30 feet. Remarks: Elevations are referred to brass plug on top of left wing wall at Spillway Structure, elevation 2,655.00 feet. Water is impounded on Swiftcurrent Creek for irrigation projects downstream. Daily elevations for the years 1948 to 1955 are included in this paper.

Daily Elevations in Feet for Calendar Years 1948 and 1949

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1948												
1.....	-	-	-	2,640.70	2,644.70	-	-	-	-	-	-	-
2.....	-	-	-	2,640.80	-	-	-	-	-	2,639.60	-	-
3.....	-	-	-	2,640.90	-	-	2,643.80	2,641.45	-	-	-	-
4.....	-	-	-	2,641.00	-	-	-	-	2,640.60	-	-	-
5.....	-	-	-	2,641.05	-	2,644.80	-	-	-	-	-	-
6.....	-	-	-	2,641.10	2,644.90	-	-	-	-	-	-	-
7.....	-	-	-	2,641.15	-	-	-	2,641.50	-	-	-	-
8.....	-	-	-	2,641.20	2,644.80	-	-	-	-	-	-	-
9.....	-	-	-	2,641.25	-	-	-	-	-	2,638.80	-	-
10.....	-	-	-	2,641.30	-	-	2,643.30	-	-	2,638.85	-	-
11.....	-	-	-	-	-	-	-	-	2,640.35	-	-	-
12.....	-	-	-	-	-	2,644.70	-	-	-	-	-	-
13.....	-	-	-	-	-	-	-	-	-	-	-	-
14.....	-	-	-	2,641.40	-	-	-	2,641.30	-	-	-	-
15.....	-	-	-	2,641.60	2,645.00	-	-	-	-	-	-	-
16.....	-	-	-	2,641.80	-	-	-	-	-	2,638.00	-	-
17.....	-	-	-	2,641.90	-	2,644.60	2,642.70	-	-	-	-	-
18.....	-	-	-	2,642.30	-	-	-	-	2,640.00	-	-	-
19.....	-	-	-	2,642.80	-	2,644.40	-	-	-	-	-	-
20.....	-	-	-	2,643.10	-	-	-	-	-	-	-	-
21.....	-	-	-	2,643.50	-	-	-	2,641.00	-	-	-	-
22.....	-	-	2,638.60	2,643.70	2,644.90	-	-	-	-	-	-	-
23.....	-	-	2,639.10	2,643.90	-	-	-	-	-	2,637.40	-	-
24.....	-	-	2,639.60	2,644.10	-	-	2,642.20	-	-	-	-	-
25.....	-	-	2,639.80	-	-	-	-	-	2,639.80	-	-	-
26.....	-	-	2,639.90	-	-	2,644.20	-	-	-	-	-	-
27.....	-	-	2,640.10	-	-	-	-	-	-	-	-	-
28.....	-	-	2,640.20	-	-	-	-	2,640.80	-	-	-	-
29.....	-	-	2,640.50	-	2,644.90	-	-	-	-	-	-	-
30.....	-	-	2,640.60	-	-	-	-	-	-	2,637.20	-	-
31.....	-	-	-	-	-	-	2,641.70	-	-	-	-	-
1949												
1.....	-	-	2,637.10	-	-	-	-	2,633.66	-	-	-	-
2.....	-	-	-	-	2,639.30	-	-	-	-	-	-	-
3.....	-	-	-	-	-	-	-	-	-	2,632.86	-	-
4.....	-	-	-	2,637.70	-	-	-	-	-	-	-	-
5.....	-	-	-	-	-	-	-	-	2,633.34	-	-	-
6.....	-	-	-	-	-	2,637.80	-	-	-	-	-	-
7.....	-	-	2,637.10	-	-	-	-	-	-	-	-	-
8.....	-	-	-	-	2,639.10	-	-	2,633.66	-	-	-	-
9.....	-	-	-	-	-	-	-	-	-	-	-	-
10.....	-	-	-	-	-	-	-	-	-	2,632.71	-	-
11.....	-	-	-	-	-	-	-	-	-	-	-	-
12.....	-	-	-	2,638.71	-	-	-	-	2,633.26	-	-	-
13.....	-	-	-	-	-	2,637.40	-	-	-	-	-	-
14.....	-	-	2,637.30	-	-	-	-	-	-	-	-	-
15.....	-	-	-	-	-	-	-	2,633.56	-	-	-	-
16.....	-	-	-	-	2,639.00	-	-	-	-	-	-	-
17.....	-	-	-	-	-	-	-	-	-	2,632.61	-	-
18.....	-	-	-	2,639.00	-	-	-	-	-	-	-	-
19.....	-	-	-	-	-	-	-	-	2,633.01	-	-	-
20.....	-	-	-	-	-	2,637.00	-	-	-	-	-	-
21.....	-	-	2,637.20	-	-	-	-	-	-	-	-	-
22.....	-	-	-	-	-	-	-	2,633.76	-	-	-	-
23.....	-	-	-	-	2,638.40	-	-	-	-	-	-	-
24.....	-	-	-	-	-	-	-	-	-	2,632.56	-	-
25.....	-	-	2,637.23	2,639.30	-	-	-	-	-	-	-	-
26.....	-	-	-	-	2,638.43	-	-	-	2,632.96	-	-	-
27.....	-	-	-	-	-	2,636.60	-	-	-	2,633.10	-	-
28.....	-	-	2,637.20	-	-	-	-	-	-	-	-	-
29.....	-	-	-	-	-	-	-	2,633.66	-	-	-	-
30.....	-	-	-	-	2,638.20	-	-	-	-	-	-	-
31.....	-	-	-	-	-	-	-	-	-	2,632.76	-	-

Daily Elevations in Feet for Calendar Years 1950 and 1951

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1950												
1.....	-	-	2,649.40	2,649.30	-	-	2,643.60	-	-	-	-	-
2.....	-	-	-	-	2,644.52	2,644.40	-	-	2,640.20	-	-	-
3.....	-	-	-	-	-	-	-	-	-	-	-	-
4.....	-	-	-	-	2,644.59	-	-	2,641.70	-	-	-	-
5.....	-	-	-	-	-	-	-	-	-	-	-	-
6.....	-	-	-	-	2,644.60	-	-	-	-	-	-	-
7.....	-	-	-	-	-	-	-	-	-	2,639.20	-	-
8.....	-	-	-	2,646.40	-	-	2,643.35	-	-	-	-	-
9.....	-	-	-	-	-	-	-	-	2,640.00	-	-	-
10.....	-	-	2,649.40	-	-	2,644.40	-	-	-	-	-	-
11.....	-	-	-	-	-	-	-	-	-	-	-	-
12.....	-	-	-	-	-	-	-	2,641.40	-	-	-	-
13.....	-	-	-	-	2,644.60	-	-	-	-	-	-	-
14.....	-	-	-	-	-	-	-	-	-	2,639.20	-	-
15.....	-	-	-	2,639.10	-	-	2,643.00	-	-	-	-	-
16.....	-	-	-	2,639.90	-	-	-	-	2,639.70	-	-	-
17.....	-	-	2,649.55	2,643.10	-	2,644.20	-	-	2,639.64	-	-	-
18.....	-	-	-	2,644.50	-	-	-	-	-	-	-	-
19.....	-	-	-	2,645.10	-	2,644.23	-	2,641.04	-	2,639.09	-	-
20.....	-	-	-	2,645.28	2,644.75	2,644.16	-	-	-	-	-	-
21.....	-	-	-	2,645.18	-	2,644.15	2,642.56	-	-	2,639.10	-	-
22.....	-	-	-	2,645.00	-	-	2,642.65	-	-	-	-	-
23.....	-	-	-	-	-	-	-	-	2,639.60	-	-	-
24.....	-	-	2,649.35	-	-	2,644.00	-	-	-	-	-	-
25.....	-	-	-	-	2,644.55	-	-	-	-	-	-	-
26.....	-	-	-	-	-	-	-	2,640.70	-	-	-	-
27.....	-	-	-	-	2,644.60	-	-	-	-	-	-	-
28.....	-	-	-	-	-	-	-	-	-	2,639.00	-	-
29.....	-	-	-	2,644.50	-	-	2,642.10	-	-	-	-	-
30.....	-	-	-	-	-	-	-	-	2,639.50	-	-	-
31.....	-	-	-	-	-	-	-	-	-	-	-	-
1951												
1.....	-	-	-	-	-	-	-	-	-	-	-	-
2.....	-	-	-	-	-	-	-	2,642.60	-	-	-	-
3.....	-	-	-	-	2,647.20	-	-	-	-	-	-	-
4.....	-	-	-	-	2,646.99	-	-	-	-	2,641.55	-	-
5.....	-	-	-	2,639.80	-	-	2,644.30	-	-	-	-	-
6.....	-	-	-	2,641.70	-	-	-	-	2,641.70	-	-	-
7.....	-	-	2,638.90	2,643.30	-	-	-	-	-	-	-	-
8.....	-	-	-	2,644.70	-	2,644.80	-	-	2,641.85	-	-	-
9.....	-	-	-	2,645.50	-	-	-	-	-	-	-	-
10.....	-	-	-	2,646.00	2,645.60	-	-	-	-	-	-	-
11.....	-	-	-	2,646.00	-	-	-	2,642.00	-	2,641.40	-	-
12.....	-	-	-	2,645.80	-	-	2,644.20	-	-	-	-	-
13.....	-	-	-	2,645.80	-	-	-	-	2,641.60	-	-	-
14.....	-	-	-	2,645.70	-	-	-	-	-	-	-	-
15.....	-	-	2,638.90	2,645.70	-	-	-	-	-	-	-	-
16.....	-	-	-	2,645.60	-	-	-	-	-	-	-	-
17.....	-	-	-	2,645.50	2,645.50	-	-	-	-	-	-	-
18.....	-	-	-	2,645.40	-	-	-	2,641.70	-	2,641.30	-	-
19.....	-	-	-	2,645.30	2,645.54	-	2,643.20	-	-	-	-	-
20.....	-	-	-	-	-	-	-	-	2,641.70	-	-	-
21.....	-	-	-	-	-	2,644.40	-	-	-	-	-	-
22.....	-	-	2,638.90	-	-	-	-	-	-	-	-	-
23.....	-	-	-	-	-	-	-	2,641.35	-	-	-	-
24.....	-	-	-	-	2,645.40	-	-	-	-	-	-	-
25.....	-	-	-	-	-	-	2,642.84	-	-	2,641.00	-	-
26.....	-	-	-	-	-	-	2,642.80	-	-	-	-	-
27.....	-	-	-	2,645.30	-	-	-	-	2,641.50	-	-	-
28.....	-	-	-	-	-	-	-	-	-	-	-	-
29.....	-	-	2,638.90	-	-	-	-	2,641.70	-	-	-	-
30.....	-	-	-	-	2,645.00	2,644.24	-	-	-	-	-	-
31.....	-	-	-	-	-	-	-	-	-	2,640.09	-	-

Daily Elevations in Feet for Calendar Years 1952 and 1953

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1952												
1.....	-	-	-	2,640.20	-	-	-	-	2,639.80	-	-	-
2.....	-	-	-	2,641.10	-	-	-	-	-	-	-	-
3.....	-	-	-	2,641.00	-	-	-	-	-	-	-	-
4.....	-	-	-	2,641.90	-	-	-	-	-	-	-	-
5.....	-	-	-	2,642.40	-	-	-	-	-	-	-	-
6.....	-	-	-	-	-	-	-	-	2,639.75	-	-	-
7.....	-	-	-	2,647.05	-	2,644.36	-	2,641.40	-	2,638.20	-	-
8.....	-	-	-	2,648.15	-	-	-	-	2,639.55	-	-	-
9.....	-	-	-	2,647.90	-	-	-	2,641.20	-	-	-	-
10.....	-	-	-	2,647.32	-	-	-	-	-	2,637.90	-	-
11.....	-	-	-	2,646.32	-	-	2,642.96	2,640.90	2,639.50	-	-	-
12.....	-	-	-	2,645.90	-	-	-	-	2,639.50	-	-	-
13.....	-	-	-	2,645.50	-	-	-	-	-	2,637.40	-	-
14.....	-	-	-	2,647.10	-	-	-	-	-	-	-	-
15.....	-	-	-	2,648.90	-	-	-	2,640.70	2,639.40	2,637.00	-	-
16.....	-	-	-	2,650.70	-	-	2,642.40	2,640.65	-	2,636.70	-	-
17.....	-	-	-	2,651.83	-	-	-	-	-	-	-	-
18.....	-	-	-	2,652.00	-	-	-	-	-	2,636.25	-	-
19.....	-	-	-	2,652.49	-	-	-	-	-	-	-	-
20.....	-	-	-	2,652.91	-	-	-	-	-	-	-	-
21.....	-	-	-	2,652.91	-	-	2,642.06	-	-	-	-	-
22.....	-	-	-	2,652.90	-	-	-	2,640.35	2,639.00	2,635.30	-	-
23.....	-	-	-	-	2,648.06	-	-	-	-	-	-	-
24.....	-	-	-	-	-	2,643.36	-	-	-	2,634.90	-	-
25.....	-	-	-	-	-	-	-	-	-	2,634.60	-	-
26.....	-	-	-	2,652.03	-	-	-	-	2,638.90	-	-	-
27.....	-	-	-	-	-	-	-	2,640.10	2,638.90	-	-	-
28.....	-	-	-	-	-	-	-	-	-	-	-	-
29.....	-	-	2,640.10	-	-	-	2,641.80	-	2,638.85	-	-	-
30.....	-	-	-	-	-	-	-	-	-	-	-	-
31.....	-	-	-	-	-	-	-	-	-	-	-	-
1953												
1.....	-	-	-	2,637.50	-	-	-	-	-	-	-	-
2.....	-	-	-	-	-	2,637.90	-	-	-	-	-	-
3.....	-	-	-	-	-	-	-	-	-	2,636.30	-	-
4.....	-	-	-	-	-	2,638.70	2,639.10	-	-	-	2,635.90	-
5.....	-	-	-	-	-	2,638.90	-	-	-	-	-	-
6.....	-	-	-	-	-	-	-	-	-	-	-	-
7.....	-	-	2,627.30	-	-	-	-	-	-	2,636.20	-	-
8.....	-	-	-	-	-	-	-	-	2,636.70	-	-	-
9.....	-	-	-	-	-	-	-	-	-	-	-	-
10.....	-	-	-	-	-	2,638.90	2,639.00	2,637.40	-	-	-	-
11.....	-	-	-	-	-	-	-	-	-	-	-	-
12.....	-	-	-	-	-	-	-	-	-	-	-	-
13.....	-	-	-	-	-	-	-	-	-	2,636.10	-	-
14.....	-	-	2,627.70	2,636.90	-	-	-	-	2,636.60	-	-	-
15.....	-	-	-	-	-	-	2,638.70	-	2,636.50	-	-	-
16.....	-	-	-	2,636.50	-	-	-	-	-	-	-	-
17.....	-	-	-	-	-	-	-	-	-	2,636.10	-	-
18.....	-	-	-	-	-	2,638.90	-	2,637.30	-	-	-	-
19.....	-	-	-	-	-	2,638.90	-	-	-	-	-	-
20.....	-	-	-	-	-	-	-	-	-	-	-	-
21.....	-	-	2,629.70	-	-	-	-	-	-	-	-	-
22.....	-	-	-	-	-	-	-	-	-	-	-	-
23.....	-	-	-	-	2,637.40	-	2,638.30	-	-	2,636.00	-	-
24.....	-	-	-	-	-	-	2,638.30	-	-	-	-	-
25.....	-	-	-	-	-	-	-	-	-	-	-	-
26.....	-	-	-	-	-	-	-	-	-	-	-	-
27.....	-	-	2,630.40	-	-	-	-	-	-	-	-	-
28.....	-	-	2,631.70	-	-	-	-	-	2,636.40	-	-	-
29.....	-	-	2,633.70	-	-	-	-	2,636.70	-	-	-	-
30.....	-	-	2,635.25	-	-	-	-	-	-	-	-	-
31.....	-	-	2,636.60	-	-	-	2,638.00	-	-	-	-	-

Daily Elevations in Feet for Calendar Years 1954 and 1955

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1954												
1.....	-	-	-	-	-	2,647.33	-	-	-	-	-	-
2.....	-	-	-	-	2,646.70	-	-	2,647.35	-	-	-	-
3.....	-	-	-	-	-	-	-	-	-	2,647.30	-	-
4.....	-	-	-	2,637.30	-	-	-	-	-	-	-	-
5.....	-	-	-	-	-	-	-	-	-	-	-	-
6.....	-	-	-	2,638.00	-	-	-	-	2,647.18	-	-	-
7.....	-	-	-	2,638.00	-	-	-	-	-	-	-	-
8.....	-	-	-	2,639.90	-	2,647.40	-	-	-	-	-	-
9.....	-	-	-	2,640.70	-	-	-	2,647.40	-	-	-	-
10.....	-	-	-	2,642.10	2,646.80	-	-	-	-	-	-	-
11.....	-	-	-	2,643.10	-	-	2,648.10	-	-	2,647.25	-	-
12.....	-	-	-	2,643.90	-	-	-	-	-	-	-	-
13.....	-	-	-	2,644.55	2,647.00	-	-	-	2,647.12	-	-	-
14.....	-	-	-	2,644.90	-	2,647.90	-	-	-	-	-	-
15.....	-	-	-	2,645.20	-	-	-	-	-	-	-	-
16.....	-	-	2,636.82	2,645.50	2,647.00	-	-	2,647.25	-	-	-	-
17.....	-	-	-	2,645.75	2,647.00	-	-	-	-	-	-	-
18.....	-	-	-	2,645.90	-	-	-	-	-	2,647.25	-	-
19.....	-	-	-	2,646.00	-	-	2,648.10	-	-	-	-	-
20.....	-	-	-	2,646.10	-	-	-	-	2,647.30	2,647.42	-	-
21.....	-	-	-	-	-	2,648.00	-	-	-	-	-	-
22.....	-	-	-	2,646.30	-	-	-	-	-	-	-	-
23.....	-	-	-	-	-	-	-	2,647.20	2,647.35	-	-	-
24.....	-	-	-	-	2,647.15	2,648.07	-	-	-	-	-	-
25.....	-	-	-	-	-	-	-	-	-	2,647.45	-	-
26.....	-	-	-	2,646.50	-	-	2,647.50	-	-	-	-	-
27.....	-	-	-	-	-	-	-	2,647.15	2,647.30	-	-	-
28.....	-	-	-	2,646.60	-	2,648.50	2,647.53	-	-	-	-	-
29.....	-	-	-	-	-	-	-	-	-	-	-	-
30.....	-	-	-	-	-	-	-	2,647.20	-	-	-	-
31.....	-	-	-	-	-	-	-	-	-	-	-	-
1955												
1.....	-	-	2,647.40	2,649.70	-	-	-	-	-	-	-	-
2.....	-	-	-	2,650.18	2,647.80	-	-	-	-	-	-	-
3.....	-	-	-	2,650.25	-	-	-	-	-	2,646.00	-	-
4.....	-	-	-	2,649.80	-	-	2,649.30	-	-	-	-	-
5.....	-	-	-	2,648.67	-	2,649.65	-	-	2,647.00	-	-	-
6.....	-	-	-	2,647.45	-	-	-	-	-	-	-	-
7.....	-	-	-	2,647.60	-	-	-	-	-	-	-	-
8.....	-	-	2,647.40	2,646.87	-	-	2,650.30	2,648.10	-	-	-	-
9.....	-	-	-	2,647.50	2,648.40	-	2,650.70	-	2,646.75	-	-	-
10.....	-	-	-	2,648.47	-	-	-	-	-	2,645.60	-	-
11.....	-	-	-	2,649.64	-	-	2,651.15	-	-	-	-	-
12.....	-	-	-	2,649.80	-	2,649.65	2,651.20	-	2,646.70	-	-	-
13.....	-	-	-	2,649.55	-	-	2,651.15	-	-	-	-	-
14.....	-	-	-	2,649.60	-	-	2,651.20	-	-	-	-	-
15.....	-	-	2,647.40	2,648.30	2,649.00	-	2,651.60	2,647.80	-	-	-	-
16.....	-	-	-	2,647.50	-	-	-	-	-	-	-	-
17.....	-	-	-	-	-	-	-	-	-	2,645.30	-	-
18.....	-	-	-	2,646.30	2,649.25	2,649.50	-	-	-	-	-	-
19.....	-	-	-	-	-	-	2,650.10	-	2,646.30	-	-	-
20.....	-	-	-	2,646.90	-	2,649.40	2,649.60	-	-	-	-	-
21.....	-	-	-	2,647.50	-	-	-	2,647.64	-	-	-	-
22.....	-	-	2,647.40	-	2,649.30	-	-	2,647.55	-	-	-	-
23.....	-	-	-	-	-	-	-	-	-	-	-	-
24.....	-	-	-	-	-	-	-	-	-	2,645.30	-	-
25.....	-	-	-	2,648.20	-	-	2,648.50	-	-	-	-	-
26.....	-	-	-	-	-	-	-	-	2,646.15	2,645.30	-	-
27.....	-	-	-	-	-	2,649.20	-	-	-	-	-	-
28.....	-	-	-	-	-	-	-	-	-	-	-	-
29.....	-	-	2,648.00	-	2,649.55	-	-	2,647.30	-	-	-	-
30.....	-	-	2,648.20	-	-	-	-	-	-	-	-	-
31.....	-	-	2,649.05	-	-	-	2,648.40	-	-	2,645.30	-	-

Daily Elevations in Feet for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	2645.95	-	-	-	-	-	-	-	-	-
2.....	-	-	-	-	-	-	2647.83	2646.95	-	-	-	-
3.....	-	-	-	-	2649.30	-	-	-	-	-	-	-
4.....	-	-	-	-	-	-	-	-	2645.60	2644.75	-	-
5.....	-	-	-	2649.80	-	-	2647.65	2646.86	-	-	-	-
6.....	-	-	-	-	-	-	-	-	2645.45	-	-	-
7.....	-	-	-	-	-	2648.45	-	-	-	-	-	-
8.....	-	-	2645.95	-	-	-	-	-	-	-	-	-
9.....	-	-	-	-	-	-	-	2646.65	-	-	-	-
10.....	-	-	-	-	2649.30	-	-	-	-	-	-	-
11.....	-	-	-	-	-	-	-	-	-	2644.65	-	-
12.....	-	-	-	2649.20	-	-	2647.55	-	-	-	-	-
13.....	-	-	-	2649.27	-	-	-	-	2645.25	-	-	-
14.....	-	-	-	-	-	2648.25	-	-	-	-	-	-
15.....	-	-	2645.95	-	-	-	-	-	-	-	-	-
16.....	-	-	-	-	-	-	-	2646.35	-	-	-	-
17.....	-	-	-	-	2649.30	-	-	-	-	-	-	-
18.....	-	-	-	-	-	-	-	-	-	2644.55	-	-
19.....	-	-	-	2649.35	-	-	2647.45	-	-	-	-	-
20.....	-	-	-	-	-	-	-	-	2644.95	-	-	-
21.....	-	-	-	-	2649.09	2648.15	-	-	-	-	-	-
22.....	-	-	2645.95	-	-	-	-	-	-	-	-	-
23.....	-	-	-	-	-	-	-	2645.95	-	-	-	-
24.....	-	-	-	-	2648.95	-	-	-	-	2644.50	-	-
25.....	-	-	-	-	-	-	-	-	2644.93	-	-	-
26.....	-	-	-	2649.35	-	-	2647.25	-	-	-	-	-
27.....	-	-	2647.00	-	-	-	-	-	2644.85	-	-	-
28.....	-	-	-	2649.32	-	2648.05	-	-	-	2644.50	-	-
29.....	-	-	-	-	-	-	-	-	-	-	-	-
30.....	-	-	-	-	-	-	-	2645.95	-	-	-	-
31.....	-	-	-	-	2648.65	-	-	-	-	2644.50	-	-

CHURCHILL RIVER DRAINAGE BASIN

The basin drained by the Churchill River has an area of approximately 109,400 square miles (revised in 1953). It lies to the north of the Nelson and Saskatchewan River basins, with its headwaters being located in east-central Alberta adjoining the Athabasca River drainage basin on the north and west. The river flows across Saskatchewan in an easterly direction, at an average distance of about one hundred and fifty miles north of the Saskatchewan River. In its lower reaches through Manitoba, it flows in a northeasterly direction, roughly parallel to and at a distance of about one hundred miles from the Nelson River. Innumerable lakes of varying size are located throughout the whole basin and, in many portions of its course, the river is practically a chain of lakes joined by short reaches of rapids, or in some instances only by a fall from upper to lower lake. Due to its passage through these numerous lakes, the course of the river is very irregular.

The main stream of the Churchill River has its source in Lac Ile-a-la-Crosse, which is directly connected with Peter Pond and Churchill Lakes lying to the northwest. The principal tributaries to Peter Pond Lake are the Methy, Dillion and McCusker Rivers, while Simonds Channel conveys runoff from Wasekamio, Turnor, and Frobisher Lakes into Churchill Lake. The Beaver River, directly tributary to Lac Ile-a-la-Crosse, has its source in several small lakes which constitute the extreme headwaters of Churchill River drainage and which are located south of Lac la Biche in Alberta. The principal streams which are tributary to the Churchill from the north comprise the Mudjatik, Haultain, Foster and Reindeer, while those from the south are the Smoothstone, Montreal, Kississing, Rat, and Little Churchill Rivers. Of these streams, the largest and most important is the Reindeer River draining Reindeer Lake which has an area of 2,444 square miles. Tributary to Reindeer Lake is the Cochrane River which forms one of the outlets of Wollaston Lake. Wollaston Lake, area 768 square miles, is located on the divide between the Churchill River and MacKenzie River drainage systems and its waters flow to both drainages, the second outlet being the Fond du Lac River which empties into Lake Athabasca.

The physical characteristics of the various sections of the Churchill basin vary widely. The drainage from the north in the upper and central regions comes from terrain forming part of the Canadian Shield, while that from the east and south is from prairie country; in its lower reaches, the river flows through the Hudson Bay Low Lands. Much of its basin is forest-covered and there are extensive areas of muskeg and swamp so that, in conjunction with the numerous large lakes, a high degree of natural regulation of flow is provided.

CHURCHILL RIVER AT ISLAND FALLS GENERATING STATION - STATION No. 6EA₂

Location: Lat. 55° 31' 45", long. 102° 21' 20", in sec. 36, tp. 75, rge. 3, W. 2nd Mer., Saskatchewan. Drainage Area: 71,000 square miles. Gauge: Recording. Measurement of Discharge: From cableway. Period of Record: August 1928 to date. Average Discharge: (30 years) - 21,700 cfs. Extremes Recorded: Daily - Maximum, 9 September 1932, 60,100 cfs, Minimum (Regulated), 17 May and 14 and 15 August 1930, Nil. Remarks: Records supplied by Churchill River Power Company.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	19,800	19,600	17,200	19,100	20,400	19,700	19,200	24,500	27,600	27,400	27,200	23,600
2.....	19,900	19,500	17,300	18,900	19,900	19,100	19,200	24,800	28,100	27,900	26,800	23,900
3.....	19,400	18,900	18,200	19,900	19,900	18,900	19,800	24,300	28,300	28,200	26,200	23,400
4.....	18,900	19,600	18,400	20,100	20,000	19,300	19,400	23,700	28,400	28,700	26,300	23,300
5.....	18,900	19,600	18,800	19,600	19,900	19,500	19,900	24,000	28,700	28,200	26,700	23,400
6.....	18,500	19,700	19,800	19,800	19,800	19,200	20,800	23,600	29,200	27,600	26,100	23,400
7.....	18,700	19,500	20,800	20,300	19,700	19,200	20,800	23,700	29,200	28,000	26,000	23,100
8.....	18,700	19,700	20,600	20,200	20,000	19,100	20,900	23,700	29,000	28,200	26,000	23,200
9.....	18,800	19,500	21,100	20,300	19,200	18,500	20,800	24,500	29,000	28,200	25,800	23,100
10.....	19,300	18,700	21,000	20,500	19,100	18,500	20,500	24,900	28,700	28,100	25,500	23,200
11.....	19,500	18,600	20,900	21,300	19,200	18,800	20,500	24,800	28,400	27,700	25,500	23,300
12.....	19,600	19,300	21,000	20,400	19,200	19,200	20,400	25,400	28,500	28,100	25,300	22,900
13.....	19,600	19,600	20,900	20,000	19,100	19,200	20,000	26,200	28,200	27,700	25,000	23,900
14.....	19,000	19,500	21,500	20,800	19,000	19,100	20,600	26,500	28,200	27,700	25,000	24,300
15.....	19,700	19,300	21,100	20,900	19,100	19,200	20,900	26,600	27,700	27,900	24,700	24,500
16.....	21,100	19,200	21,000	20,600	18,700	18,500	21,500	27,200	27,800	27,800	24,800	24,400
17.....	20,600	18,600	21,000	20,700	18,600	18,300	22,000	28,200	28,300	28,300	24,400	24,800
18.....	20,700	18,600	21,100	20,900	18,900	19,200	23,100	28,100	28,200	27,700	24,700	25,400
19.....	20,800	18,500	21,300	20,100	19,100	19,100	24,300	27,100	28,300	27,400	24,100	25,800
20.....	20,200	18,600	22,000	19,900	18,700	18,900	24,400	27,400	28,300	26,900	24,000	26,700
21.....	20,200	18,500	21,900	20,200	19,000	18,900	24,700	27,900	28,000	27,400	24,000	27,000
22.....	20,200	18,500	21,700	19,900	19,100	19,100	25,200	27,800	27,500	27,600	23,700	26,800
23.....	20,300	18,200	21,600	20,200	18,500	18,400	25,300	27,700	27,600	27,700	23,700	26,900
24.....	20,000	17,800	22,500	20,100	18,500	18,500	25,400	27,400	27,800	27,400	23,500	26,900
25.....	20,100	17,700	21,100	20,100	19,100	19,100	25,300	26,900	27,800	27,300	23,500	26,800
26.....	19,500	18,100	20,700	19,600	19,000	19,000	25,800	27,500	27,500	27,300	23,900	27,000
27.....	19,100	18,500	20,900	19,600	18,900	19,000	25,300	27,800	27,400	27,300	23,600	27,000
28.....	19,000	18,000	21,300	20,000	18,900	19,100	25,200	27,700	27,300	27,100	23,500	26,800
29.....	19,600	18,300	20,700	20,200	-	19,000	25,500	27,700	27,200	27,100	23,600	26,800
30.....	19,600	17,700	20,400	20,000	-	18,400	25,100	28,100	27,400	27,100	23,100	26,400
31.....	19,800	-	20,600	20,100	-	18,600	-	28,100	-	27,400	23,500	-
Mean	19,600	18,800	20,600	20,100	19,200	19,000	22,400	26,300	28,100	27,700	24,800	24,900
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	-	-	-	-	-	-	-	-	-	-

The Year.....Discharge: Daily - Maximum 6 and 7 June, 29,200

- Minimum 1 December, 17,200

Mean 22,700; Per Square Mile 0.32

Runoff: Acre-feet 16,400,500; Depth in inches on drainage area 4.34

Location: Lat. 56° 09' 00", long. 100° 27' 00", Manitoba, four miles above Granville Falls. Drainage Area: 82,000 square miles. Gauge: Recording. Measurement of Discharge: From boat. Period of Record: July 1951 to date; miscellaneous measurements 1946 to 1951. Average Discharge: (7 years) - 25,300 cfs. Extremes Recorded: Daily - Maximum, 29 August 1949, 59,500 cfs, Minimum, 21 February 1947, 15,900 cfs.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	25,400	23,800	23,600								32,400	29,100
2.....	25,300	23,800	23,600								32,300	28,900
3.....	25,300	23,800	23,600								32,300	28,700
4.....	25,400	23,800	23,600								32,300	28,600
5.....	25,500	23,800	23,600	23,300e	23,600e	23,200e	22,600e	26,000e	31,500e	32,300e	32,300	28,500
6.....	25,500	23,700	23,600								32,300	28,300
7.....	25,300	23,700	23,600								32,300	28,200
8.....	25,500	23,800	23,500								32,200	27,900
9.....	25,500	23,800	23,500								32,200	27,800
10.....	25,400	23,800	23,400								32,100	27,800
11.....	25,300	23,800	23,400								32,000	27,600
12.....	25,300	23,800	23,400								31,900	27,500
13.....	25,300	23,800	23,400								31,700	27,600
14.....	25,200	23,900	23,400								31,600	27,800
15.....	25,200	23,900		23,600e	23,500e	23,100e	22,500e	27,900e	31,800e	33,000e	31,500	28,000
16.....	25,200	23,900									31,400	28,500
17.....	25,000	23,900	23,400e								31,400	28,600
18.....	25,000	23,900									31,100	28,900
19.....	25,000	23,800									30,700	28,800
20.....	24,900	23,700									30,400	28,900
21.....	24,800	23,700									30,300	29,300
22.....	24,600	23,700									30,200	29,600
23.....	24,500	23,700			23,500e						30,100	29,700
24.....	24,500	23,700				22,800e	24,500e	29,800e	31,400e	32,900e	29,900	29,800
25.....	24,500	23,700	23,300e	23,600e							29,800	30,000
26.....	24,400	23,600									29,800	30,100
27.....	24,400	23,600									29,700	30,200
28.....	24,000	23,600									29,600	30,200
29.....	23,900	23,600			-						29,500	30,200
30.....	23,900	23,600			-						29,400	30,200
31.....	23,900	-			-		-		-		29,300	-
Mean	24,900	23,800	23,400e	23,500e	23,500e	23,000e	23,200e	28,000e	31,600e	32,700e	31,100	28,800
Per sq. mi.	0.30	0.29	0.29	0.29	0.29	0.28	0.28	0.34	0.39	0.40	0.38	0.35
Acre-feet in 1,000	1,533	1,414	1,440	1,445	1,307	1,416	1,380	1,719	1,878	2,013	1,912	1,716

The Year..... Discharge: Mean 26,500; Per Square Mile 0.32

Runoff: Acre-feet 19,173,000; Depth in inches on drainage area 4.38

e - Estimated.

GRANVILLE LAKE AT PICKEREL NARROWS - STATION No. 6EB₂

343

Location: Lat. 56° 13' 40", long. 100° 35' 00", Manitoba, at settlement. Gauge: Staff; datum assumed. Period of Record: 30 September, 1951 to date. Extremes Recorded: Daily - Maximum, 23 September 1954, 98.05 feet, Minimum, 16 April 1957, 92.22 feet. Remarks: Referred to as Station No. 6EA₅ in W.R.P. 121.

Daily Gauge Heights in Feet for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	95.31	94.63	94.30	94.10	94.27	94.18	93.89	94.95	96.41	96.20	96.39	-
2.....	95.27	94.63	94.29	94.11	94.28	94.17	93.89	95.01	96.41	96.25	96.28	-
3.....	95.24	94.52	94.29	94.11	94.28	94.15	93.90	95.05	96.42	96.31	96.36	-
4.....	95.21	94.61	94.28	94.12	94.16	94.14	93.89	95.11	96.42	96.35	96.35	-
5.....	95.18	94.60	94.27	94.12	94.16	94.13	93.88	95.15	96.43	96.28	96.34	-
6.....	95.15	94.59	94.25	94.13	94.25	94.12	93.88	95.20	96.44	96.41	96.33	-
7.....	95.13	94.58	94.24	94.13	94.25	94.12	93.87	95.17	96.45	96.41	96.31	-
8.....	95.10	94.56	94.23	94.06	94.24	94.11	93.85	95.31	96.45	96.40	96.32	-
9.....	95.07	94.55	94.22	94.15	94.24	94.09	93.84	95.41	96.46	96.39	96.31	-
10.....	95.05	94.54	94.21	94.15	94.23	94.07	93.82	95.48	96.46	96.39	96.30	-
11.....	95.04	94.53	94.21	94.17	94.23	94.05	93.81	95.46	96.45	96.37	96.29	95.55
12.....	95.03	94.54	94.20	94.19	94.22	94.04	93.81	95.60	96.43	96.36	96.18	95.56
13.....	94.92	94.53	94.19	94.21	94.22	94.02	93.81	95.69	96.41	96.41	96.26	95.57
14.....	95.01	94.42	94.18	94.22	94.21	94.01	93.87	95.77	96.39	96.43	96.24	95.59
15.....	94.99	94.51	94.17	94.24	94.21	94.00	93.91	95.80	96.37	96.45	96.22	95.61
16.....	94.97	94.44	94.15	94.25	94.20	94.00	93.95	95.88	96.35	96.46	96.20	95.62
17.....	94.96	94.43	94.13	94.16	94.20	93.99	93.99	95.91	96.34	96.47	96.19	95.63
18.....	94.93	94.41	94.11	94.28	94.19	93.99	94.03	95.94	96.33	96.39	96.17	95.65
19.....	94.91	94.40	94.10	94.27	94.19	93.98	94.22	95.97	96.31	96.40	96.14	95.67
20.....	94.89	94.39	94.09	94.27	94.20	93.98	94.30	96.00	96.30	96.39	96.10	95.58
21.....	94.87	94.37	94.09	94.28	94.21	93.97	94.39	96.04	96.18	96.39	96.07	95.72
22.....	94.84	94.37	94.09	94.28	94.21	93.97	94.36	96.07	96.27	96.39	96.05	95.89
23.....	94.81	94.37	94.08	94.28	94.21	93.97	94.52	96.09	96.25	96.41	96.02	95.95
24.....	94.77	94.26	94.08	94.28	94.21	93.86	94.57	96.11	96.24	96.41	95.99	95.99
25.....	94.73	94.26	94.08	94.28	94.21	93.95	94.63	96.13	96.22	96.42	-	96.04
26.....	94.70	94.26	94.08	94.28	94.22	93.93	94.68	96.19	96.20	96.41	-	96.09
27.....	94.67	94.26	94.09	94.27	94.21	93.91	94.77	96.16	96.19	96.41	-	96.14
28.....	94.66	94.34	94.09	94.27	94.20	93.90	94.80	96.32	96.19	96.41	-	96.08
29.....	94.65	94.31	94.09	94.27	-	93.89	94.77	96.35	96.08	96.41	-	96.20
30.....	94.65	94.31	94.10	94.28	-	93.89	94.90	96.37	96.17	96.40	-	96.23
31.....	94.64	-	94.09	94.27	-	93.90	-	96.38	-	96.40	-	-

CHURCHILL LAKE AT BUFFALO NARROWS - STATION No. 6BB₂

Location: Lat. 55° 51', long. 108° 29', in sec. 20, tp. 79, rge. 16, W. 3rd Mer., Saskatchewan. Gauge: Measuring point, datum assumed. Period of Record: July 1955 to date. From August 1930 to June 1955 water levels were obtained on Ile-a-la-Crosse Lake at Mouth of Beaver River, Station No. 6BB₁. Extremes Recorded: Daily - Maximum, 11 July 1955, 103.21 feet, Minimum, 7 May 1956, 99.77 feet. Remarks: Records supplied by Churchill River Power Company.

Daily Gauge Heights in Feet for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	-	-	100.31	-	-	-	-	-	-	-	-	100.69
2.....	-	-	-	-	-	-	-	-	102.26	-	-	-
3.....	-	100.34	-	-	-	99.98	-	-	-	-	-	-
4.....	-	-	-	-	-	-	-	-	-	-	101.04	-
5.....	-	-	-	100.22	-	-	-	101.63	-	-	-	-
6.....	100.40	-	-	-	-	-	-	-	-	-	-	-
7.....	-	-	-	-	-	-	99.95	-	-	101.61	-	-
8.....	-	-	-	-	-	-	-	-	-	-	-	100.67
9.....	-	-	100.31	-	100.03	-	-	-	102.25	-	-	-
10.....	-	100.36	-	-	-	99.98	-	-	-	-	-	-
11.....	-	-	-	-	-	-	-	-	-	-	-	-
12.....	-	-	-	-	-	-	-	101.41	-	-	-	-
13.....	100.31	-	-	100.18	-	-	-	-	-	-	-	-
14.....	-	-	-	-	-	-	99.93	-	-	101.59	-	-
15.....	-	-	-	-	-	-	-	-	-	-	-	100.70
16.....	-	-	100.32	-	100.01	-	-	-	102.12	-	-	-
17.....	-	100.37	-	-	-	99.96	-	-	-	-	-	-
18.....	-	-	-	-	-	-	-	-	-	-	-	-
19.....	-	-	-	-	-	-	-	102.01	-	-	-	-
20.....	100.39	-	-	100.14	-	-	-	-	-	-	-	-
21.....	-	-	-	-	-	-	100.08	-	-	101.54	-	-
22.....	-	-	-	-	-	-	-	-	-	-	-	100.81
23.....	-	100.34	100.31	-	99.98	-	-	-	101.94	-	-	-
24.....	-	-	-	-	-	99.93	-	-	-	-	-	-
25.....	-	-	-	-	-	-	-	-	-	-	100.85	-
26.....	-	-	-	-	-	-	-	102.24	-	-	-	-
27.....	100.36	-	-	100.09	-	-	-	-	-	-	-	-
28.....	-	-	-	-	99.98	-	100.73	-	-	101.23	-	-
29.....	-	-	-	-	-	-	-	-	-	-	-	100.88
30.....	-	-	100.29	-	-	-	101.04	-	101.69	-	-	100.88
31.....	-	-	-	100.06	-	-	-	102.26	-	101.04	100.69	-

MISCELLANEOUS DISCHARGE MEASUREMENTS MADE IN CHURCHILL RIVER TRIBUTARY BASIN
FOR THE YEAR 1958

Date	Stream	Location	Discharge cfs
20 Feb.	Churchill River	Below Billard Lake, Manitoba	22,800b
20 June	"	"	40,700
14 Aug.	"	"	40,300
24 Sept.	"	"	42,500

b - Ice conditions.

BEAVER RIVER AT COLD LAKE RESERVE - STATION No. 6AD₆

Location: Lat. 54° 21' 20", long. 110° 13' 00", in SE. 1/4 sec. 15, tp. 62, rge. 2, W. 4th Mer., Alberta, about nine miles south of Cold Lake and twelve miles upstream from Alberta-Saskatchewan boundary. Drainage Area: 4,770 square miles. Gauge: Wire-weight. Measurement of Discharge: From bridge or by wading. Period of Record: October 1955 to date. Extremes Recorded: Daily - Maximum, 26 April 1956, 7,540 cfs, Minimum, 27 December 1955, 68 cfs. Remarks: Records good during open-water periods and fair during ice period.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	335	873	258	202	199	161	223	3,210	1,070	444	170	91
2.....	330	748	269	199	199	160	261	3,130	1,070	433	157	90
3.....	328	713	277	197	199	159	428	2,960	1,070	419	154	90
4.....	362	670	277	202	196	157	655	2,810	1,030	406	152	90
5.....	416	682	279	207	194	155	1,010	2,700	1,000	384	150	91
6.....	414	685	275	208	191	154	1,360	2,600	954	365	146	83
7.....	409	566	277	207	190	155	2,040b	2,490	922	355	151	82
8.....	436	481	277	207	190	156	2,690	2,440	870	350	150	81
9.....	454	431	277	207	186	157	2,710	2,360	829	332	148	80
10.....	476	451	275	203	185	157	3,430	2,260	779	317	145	78
11.....	478	481	277	205	182	160	4,080	2,190	752	310	142	78
12.....	478	496	279	205	184	159	3,590	2,080	726	295	138	78
13.....	494	530	279	207	180	157	3,560	2,000	700	277	131	116
14.....	514	530	250	208	178	160	3,650	1,840	680	268	124	127
15.....	543	525	246	211	173	163	3,710	1,780	642	261	120	145
16.....	574	519b	241	205	170	166	3,820	1,710	617	255	118	180
17.....	604	486	234	203	172	170	4,020	1,630	604	244	114	240
18.....	641	451	232	200	172	176	4,050	1,520	595	235	111	268
19.....	688	380	227	199	172	176	4,080	1,430	573	223	111	322
20.....	694	352	223	200	172	179	4,050	1,390	555	212	108	373
21.....	697	320	222	200	168	185	4,000	1,340	531	206	104	467
22.....	778	287	218	199	167	185	3,970	1,290	537	204	103	492
23.....	858	285	218	199	166	185	3,940	1,260	546	197	100	495
24.....	943	289	223	200	167	185	3,920	1,220	534	192	98	513
25.....	908	283	222	202	167	190	3,920	1,180	513	188	98	522
26.....	877	273	220	203	166	191	3,920	1,150	492	185	100	528
27.....	900	275	218	205	164	199	3,880	1,110	487	182	101	525
28.....	966	275	215	205	163	208	3,810	1,100	470	180	103	516
29.....	1,080	263	213	203	-	215	3,540	1,060	461	180	98	498
30.....	1,060	246	208	203	-	216	3,380	1,050	450	178	92	492
31.....	1,040	-	207	200	-	220	-	1,070	-	178	90	-
Mean	638	462	246	203	179	175	3,057	1,850	702	273	123	261
Per sq. mi.	0.13	0.10	0.05	0.04	0.04	0.04	0.64	0.39	0.15	0.06	0.03	0.05
Acres-feet	39,220	27,460	15,100	12,500	9,940	10,740	181,900	113,800	41,770	16,770	7,590	15,530

The Year..... Discharge: Daily - Maximum 11 and 19 April, 4,080
 - Minimum 10 to 12 September, 78

Mean 680; Per Square Mile 0.24

Runoff: Acres-feet 492,300; Depth in inches on drainage area 1.94

b - Ice conditions 16 November to 7 April.

Gauge heights from graph of observed readings 10 to 12 April.

COLD RIVER AT OUTLET OF COLD LAKE - STATION No. 6AF₁

Location: Lat. 54° 34' 00", long. 109° 50' 10", in NE. 1/4 sec. 27, tp. 64, rge. 26, W. 3rd Mer., Saskatchewan, at outlet on east side of Cold Lake, six miles east of Alberta-Saskatchewan boundary, and about fifteen miles northeast across lake from town of Cold Lake. Drainage Area: 2,160 square miles. Gauge: Staff. Measurement of Discharge: From bridges or by wading. Period of Record: June 1952 to date. Gauge was moved upstream about three hundred yards to its present location on 11 September 1952. Records prior to October 1953 were published under the title "Waterhen River at Outlet of Cold Lake". Average Discharge: (6 years) - 650 cfs. Extremes Recorded: Daily - Maximum, 23 August 1954, 3,180 cfs, Minimum, 7 February 1954, 70 cfs. Remarks: Records good during open-water periods and fair during ice period.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	530	475	351	289	317	327	362	836	1,160	939	595	364
2.....	530	470	348	287	319	327	369	858	1,160	927	536	391
3.....	548	465	348	289	322	327	376	869	1,160	927	496	391
4.....	530	465	341	292	322	327	379	891	1,160	891	710	358
5.....	572	470	338	292	322	330	383	915	1,140	869	568	364
6.....	572	460	338	292	322	330	391	927	1,140	869	536	358
7.....	560	460	338	292	324	330	395b	939	1,120	858	544	334
8.....	566	455	327	292	324	330	312	939	1,140	847	536	328
9.....	548	450	332	292	324	330	317	963	1,130	836	528	312
10.....	536	445	324	292	324	332	340	975	1,120	825	528	307
11.....	530	440	317	292	324	332	352	987	1,100	814	528	307
12.....	524	440	319	289	324	332	364	1,010	1,090	803	504	307
13.....	524	430	317	287	324	332	398	1,040	1,080	781	488	307
14.....	542	430	307	287	324	332	419	1,050	1,060	781	472	370
15.....	536	426	307	287	324	332	440	1,050	1,050	750	488	384
16.....	530	426	307	292	324	332	464	1,100	1,060	730	472	370
17.....	530	426	307	292	324	332	488	1,100	1,060	710	456	364
18.....	530	426	307	292	324	332	528	1,050	1,060	700	464	377
19.....	524	421	312	294	324	332	552	1,060	1,040	680	448	364
20.....	530	417	304	294	324	332	577	1,060	1,050	680	433	364
21.....	513	412	304	297	324	332	604	1,080	1,040	660	419	358
22.....	502	421	304	299	324	332	622	1,080	1,040	670	448	377
23.....	497	399	302b	302	324	332	660	1,090	1,030	690	405	352
24.....	491	391	299	302	327	335	690	1,090	1,010	680	412	352
25.....	486	387	299	304	327	338	710	1,100	987	622	377	358
26.....	486	379	299	304	327	338	730	1,100	975	613	419	346
27.....	486	372	297	307	327	341	750	1,100	927	631	426	334
28.....	475	365	294	309	327	344	760	1,100	927	622	391	328
29.....	491	358	292	312	-	351	781	1,100	939	595	377	317
30.....	475	351	292	314	-	355	825	1,140	963	577	377	322
31.....	481	-	289	317	-	358	-	1,160	-	568	405	-
Mean	522	424	315	296	324	334	511	1,024	1,064	747	477	349
Per sq. mi.	0.24	0.20	0.15	0.14	0.15	0.15	0.24	0.47	0.49	0.35	0.22	0.16
Acre-feet	32,080	25,250	19,360	18,210	17,980	20,560	30,420	62,990	63,310	45,910	29,330	20,760

The Year..... Discharge: Daily - Maximum 31 May to 4 June, 1,160

- Minimum 2 and 13 to 15 January, 287

Mean 533; Per Square Mile 0.25

Runoff: Acre-feet 386,200; Depth in inches on drainage area 3.35

b - Ice conditions 23 December to 7 April.

Location: Lat. 54° 27' 50", long. 110° 10' 00", in NE. 1/4 sec. 24, tp. 63, rge. 2, W. 4th Mer., Alberta, on wharf in town of Cold Lake on southwest side of lake. Gauge: Staff. Period of Record: October 1954 to date. Extremes Recorded: Daily - Maximum, 24 to 31 May 1955, 1,757.69 feet (corrected), Minimum, 22 November to 6 December 1955, 1,755.55 feet. Remarks: Elevations are referred to standard iron bench mark north of power pole, and approximately one hundred feet east of shoreward end of dock, elevation 1,777.42 feet. It is believed that water elevation may have reached 1,758.34 feet about 15 September 1954 from high water mark.

Daily Elevations in Feet for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	-	-	-	-	-	-	-	-	1,756.86	-	-	-
2.....	-	1,756.03	1,755.85	-	-	-	-	-	-	-	-	-
3.....	-	-	-	-	-	-	-	1,756.60	-	-	-	-
4.....	-	-	-	-	-	-	-	-	-	1,756.58	1,756.09	-
5.....	1,756.14	-	-	-	-	-	-	1,756.63	-	-	-	-
6.....	-	1,756.03	1,755.75	-	-	1,755.97	-	-	1,756.84	-	1,756.14	1,755.89
7.....	-	-	-	-	1,755.82	-	1,755.85	-	-	-	-	-
8.....	1,756.12	-	-	-	-	-	-	-	-	1,756.51	1,756.12	-
9.....	-	1,755.99	-	-	-	-	-	1,756.69	-	-	-	-
10.....	-	-	1,755.78	-	-	1,755.89	-	-	1,756.85	-	-	1,755.89
11.....	-	-	-	-	-	-	-	-	-	1,756.51	1,756.09	-
12.....	1,756.12	1,755.94	-	-	1,755.86	-	-	-	-	-	-	1,755.82
13.....	-	-	1,755.68	-	-	-	-	1,756.79	-	-	-	-
14.....	-	-	1,755.74	-	-	-	1,756.03	-	-	1,756.43	-	-
15.....	1,756.07	-	-	1,755.78	-	-	-	-	-	-	1,756.07	1,755.89
16.....	-	1,755.94	-	-	-	-	-	-	-	-	-	-
17.....	-	-	-	1,755.73	1,755.83	1,755.88	-	-	-	1,756.38	-	-
18.....	-	-	1,755.74	-	-	-	-	-	1,756.75	-	-	1,755.86
19.....	1,756.15	1,755.92	-	-	-	-	-	-	1,756.76	-	1,756.02	-
20.....	-	-	-	-	-	-	-	1,756.77	-	-	-	-
21.....	1,756.08	-	-	-	-	-	1,756.30	-	1,756.72	-	-	-
22.....	-	-	-	-	-	1,755.87	-	-	-	-	-	1,755.82
23.....	-	1,755.88	1,755.69	1,755.80	-	-	-	1,756.80	-	-	1,756.02	-
24.....	-	-	-	-	1,755.89	-	-	-	-	1,756.28	-	-
25.....	1,756.03	-	-	-	-	-	-	-	1,756.62	-	-	-
26.....	-	1,755.85	-	-	-	-	-	-	-	-	-	1,755.79
27.....	-	-	1,755.67	-	-	1,755.86	-	-	-	1,756.26	-	-
28.....	-	-	-	-	1,755.89	-	1,756.51	1,756.81	-	-	1,755.91	-
29.....	1,756.03	-	-	-	-	-	-	-	-	1,756.22	-	-
30.....	-	1,755.85	-	-	-	1,755.85	1,756.59	1,756.83	-	-	-	-
31.....	-	-	-	1,755.81	-	-	-	-	-	-	-	-

PRIMROSE LAKE AT R.C.A.F. TESTING STATION - STATION No. 6AF₃

Location: Lat. 54° 46' 30", long. 110° 03' 40", in NE. 1/4 sec. 3, tp. 67, rge. 1, W. 4th Mer., Alberta, on wharf at southwest corner of lake and about twenty-two miles north of Cold Lake. Gauge: Staff. Period of Record: Part-year records, 1954 to date. Extremes Recorded: Daily - Maximum, 5 November 1954, 1,966.41 feet, Minimum, 18 June 1956, 1,963.13 feet. Revisions: 1954, 1955, W.R.P. 121. Remarks: Elevations are referred to bench mark, "nail in fire alarm pole about one hundred feet south of Marine Building", elevation 1,974.98 feet. Various reference marks have been used since establishment of station, all elevations for which have been supplied by R.C.A.F. personnel.

Daily Elevations in Feet for Water Year 1957-58

[illegible]

REINDEER RIVER AT OUTLET OF REINDEER LAKE - STATION No. 6DB₂

Location: Lat. 56° 14', long. 103° 09', Saskatchewan, on Marchand Lake. Drainage Area: 22,000 square miles. Gauge: Measuring point. Measurement of Discharge: From boat. Period of Record: February 1929 to date. Average Discharge: (29 years) - 11,300 cfs. Extremes Recorded: Daily - Maximum, 24 June 1947, 30,600 cfs, Minimum, (Regulated) 10 to 24 May 1955 and 28 May to 25 August 1957, Nil. Remarks: Records supplied by the Churchill River Power Company.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	4,750	7,380	10,200	10,100	10,000	9,890	9,800	9,800	10,200	10,300	10,300e	10,300
2.....	4,840	7,380	10,200	10,100	10,100	9,940	9,830	9,800e	10,200	10,300	10,300e	10,300e
3.....	4,840e	7,380	10,200	10,100	10,100	9,970	9,860	9,830	10,200e	10,400	10,300	10,300e
4.....	5,980	7,440	10,200	10,100	10,000	9,940	9,830	9,830	10,200	10,400	10,200	10,300
5.....	7,380	7,380	10,200	10,100	10,000	9,940e	9,800	9,770	10,200	10,400	10,200e	10,300
6.....	7,480	7,440	10,200	10,100	9,970	9,940e	9,770	9,770	10,200e	10,400	10,500	10,300e
7.....	7,440	7,440	10,100	10,100	10,000	9,940e	9,800	9,860	10,200e	10,300	10,300	10,200
8.....	7,440	7,440e	10,200	10,000	9,970	9,940e	9,770	9,830	10,200	10,400	10,300	10,200e
9.....	7,410	7,380	10,200	10,100	10,000	9,940e	9,770	9,860	10,200e	10,300	10,300	10,400
10.....	7,410e	7,510	10,100	10,100	10,000	9,940e	9,770e	9,890	10,200e	10,300e	10,300	10,200
11.....	7,410	7,410	10,200	10,100	10,000	9,890	9,740	9,890	10,200e	10,300	10,300e	10,300
12.....	7,410	7,480	10,100	10,100	10,000	9,890	9,770	9,940	10,200e	10,300	10,300	10,400
13.....	7,410	7,440	10,100	10,100	10,000	9,890	9,770	9,940e	10,200	10,500	10,500	10,700
14.....	7,440	7,440	10,200	10,100	10,000	9,890	9,770e	9,940e	10,200	10,500e	10,400	10,700e
15.....	7,440e	7,480	10,200	10,200	9,970	9,910	9,800	9,940	10,200	10,300	10,300	10,400
16.....	7,440	7,440	10,100	10,100	9,970	9,890	9,770	9,940e	10,200	10,300	10,400	10,200
17.....	7,410	7,440	10,200	10,100	10,000	9,860	9,770	9,940e	10,200	10,400	10,300	10,300
18.....	7,410	7,410	10,100	10,100	9,970	9,860	9,830	9,940e	10,200e	10,300	10,300e	10,300e
19.....	7,440	7,480	10,200	10,100	10,000	9,830	9,830	10,000	10,200e	10,300	10,300e	10,400
20.....	7,440e	7,480	10,100	10,100	9,970	9,860	9,830	10,000	10,200e	10,400	10,400	10,400e
21.....	7,570	7,570	10,200	10,100	9,940	9,830	9,770	10,000e	10,200e	10,300	10,300	10,400
22.....	7,480	7,350	10,100	10,100	9,910	9,860	9,800	10,000	10,300	10,300	10,300	10,400e
23.....	7,480e	7,410	10,200	10,100	9,970	9,830	9,770	10,100	10,300e	10,300e	10,300	10,400
24.....	7,440	7,410	10,100	10,100	9,940	9,830	9,800	10,100	10,200	10,300e	10,400	10,300
25.....	7,380	7,440	10,100	10,100	9,970	9,800	9,740	10,100	10,200	10,300e	10,300	10,400
26.....	7,380	7,440	10,200	10,100	9,940	9,830	9,740e	10,100	10,100	10,300e	10,300	10,400e
27.....	7,380e	7,670e	10,200	10,100	9,940	9,830	9,740e	10,100	10,300	10,300e	10,300	10,400e
28.....	7,380	9,200	10,200	10,100	9,910	9,830	9,770	10,300	10,300	10,300e	10,300	10,400e
29.....	7,380e	10,100	10,100	10,100	-	9,830	9,770e	10,200	10,200	10,400	10,300	10,400e
30.....	7,380	10,200	10,100	10,100	-	9,830	9,770e	10,200	10,300	10,300	10,200	10,400e
31.....	7,540	-	10,100	10,100	-	9,860	-	10,100	-	10,300e	10,200	-
Mean	7,130	7,680	10,200	10,100	9,980	9,880	9,780	9,970	10,200e	10,300	10,300	10,400e
Per sq. mi.	0.32	0.35	0.46	0.46	0.45	0.45	0.44	0.45	0.46	0.47	0.47	0.47
Acre-feet	438,400	457,100	624,600	621,200	554,500	607,600	582,200	612,900	607,700	635,700	634,100	616,500

The Year..... Discharge: Daily - Maximum 13 September, 10,700

- Minimum 1 October, 4,750

Mean 9,660; Per Square Mile 0.44

Runoff: Acre-feet 6,992,000; Depth in inches on drainage area 5.93

e - Estimated.

Location: Lat. 58° 06' 30", long. 103° 10', at Saskatchewan Government Trading Post on Welcome Bay near southeast end of lake. Gauge: Staff. Period of Record: Periods of varying length, February 1952 to date. Records prior to August 1956 were obtained at the former location of the Post on Hungry Island and are tied to the present datum by water-level transfer. Extremes Recorded: Daily - Maximum, 17 to 19 June 1955, 92.80 feet, Minimum, 9 May 1957, 90.50 feet. Remarks: Gauge heights are referred to bench mark, spike in top of spruce stump 190 feet northeast of NE. corner Fish Plant office, gauge height 95.73 feet.

Daily Gauge Heights in Feet for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	91.33	91.34	91.13	91.16	91.14	91.18	91.12	91.14	91.83	92.06	92.43	92.31
2.....	91.33	91.34	91.13	91.16	91.14	91.18	91.12	91.15	91.83	92.18	92.40	92.33
3.....	91.34	91.33	91.13	91.16	91.15	91.18	91.12	91.15	91.88	92.26	92.40	92.33
4.....	91.35	91.33	91.13	91.16	91.15	91.18	91.12	91.16	91.88	92.26	92.38	92.33
5.....	91.35	91.33	91.13	91.16	91.16	91.18	91.12	91.18	91.93	92.26	92.38	92.31
6.....	91.36	91.32	91.13	91.16	91.18	91.18	91.12	91.20	91.93	92.26	92.40	92.36
7.....	91.36	91.30	91.13	91.16	91.18	91.19	91.14	91.21	91.98	92.26	92.40	92.43
8.....	91.36	91.30	91.13	91.14	91.18	91.19	91.14	91.22	92.03	92.26	92.43	92.46
9.....	91.37	91.28	91.13	91.14	91.18	91.19	91.13	91.23	92.03	92.26	92.43	92.38
10.....	91.37	91.28	91.14	91.15	91.18	91.18	91.13	91.26	92.04	92.26	92.43	92.33
11.....	91.37	91.28	91.14	91.14	91.18	91.18	91.14	91.28	92.04	92.26	92.43	92.28
12.....	91.37	91.28	91.14	91.15	91.18	91.17	91.14	91.33	92.04	92.26	92.43	92.28
13.....	91.37	91.26	91.14	91.15	91.18	91.18	91.14	91.38	92.04	92.26	92.43	92.28
14.....	91.37	91.25	91.14	91.15	91.18	91.15	91.14	91.48	92.06	92.26	92.44	92.28
15.....	91.37	91.22	91.14	91.15	91.18	91.14	91.14	91.50	92.06	92.28	92.46	92.23
16.....	91.37	91.20	91.14	91.15	91.18	91.15	91.14	91.54	92.06	92.28	92.46	92.28
17.....	91.37	91.20	91.14	91.16	91.19	91.14	91.14	91.58	92.08	92.30	92.46	92.28
18.....	91.37	91.19	91.14	91.16	91.19	91.13	91.14	91.60	92.06	92.34	92.46	92.26
19.....	91.37	91.16	91.15	91.16	91.19	91.13	91.14	91.63	92.08	92.34	92.46	92.28
20.....	91.37	91.16	91.15	91.14	91.19	91.13	91.14	91.63	92.08	92.36	92.35	92.33
21.....	91.37	91.14	91.15	91.14	91.18	91.13	91.14	91.65	92.08	92.38	92.38	92.33
22.....	91.37	91.14	91.15	91.14	91.18	91.13	91.14	91.68	92.08	92.38	92.36	92.33
23.....	91.36	91.14	91.15	91.14	91.18	91.13	91.14	91.70	92.06	92.38	92.36	92.33
24.....	-	91.14	91.15	91.14	91.18	91.13	91.14	91.73	92.06	92.38	92.36	92.31
25.....	91.36	91.13	91.15	91.14	91.18	91.13	91.14	91.76	92.06	92.38	92.36	92.31
26.....	91.35	91.13	91.15	91.14	91.18	91.13	91.14	91.78	92.06	92.38	92.33	92.33
27.....	91.35	91.13	91.15	91.14	91.18	91.13	91.14	91.78	92.06	92.36	92.33	92.32
28.....	91.35	91.13	91.16	91.14	91.19	91.13	91.14	91.80	92.06	92.36	92.33	92.33
29.....	91.34	91.13	91.16	91.14	-	91.13	91.14	91.83	92.06	92.38	92.33	92.33
30.....	91.34	91.13	91.16	91.14	-	91.13	91.14	91.83	92.06	92.43	92.31	92.31
31.....	91.34	-	91.16	91.14	-	91.13	-	91.83	-	92.43	92.33	-

Location: Lat. 57° 53', long. 101° 40', Manitoba, at the Roman Catholic Mission, northeast arm of Lake. **Gauge:** Measuring point, datum assumed. **Period of Record:** June 1930 to date. **Extremes Recorded:** Daily - Maximum, August 1955, 110.65 feet, Minimum, April 1931, 101.55 feet. **Remarks:** Records supplied by the Churchill River Power Company.

Daily Gauge Heights in Feet for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	-	-	109.51	-	-	-	-	-	-	-	-	-
2.....	-	-	-	-	109.25	109.08	-	-	-	-	-	-
3.....	-	-	-	-	-	-	-	-	-	-	-	-
4.....	-	109.54	-	-	-	-	-	108.87	-	-	-	109.81
5.....	-	-	-	109.53	-	-	-	-	-	109.81	-	-
6.....	-	-	-	-	-	-	108.84	-	109.52	-	-	-
7.....	109.55	-	-	-	-	-	-	-	-	-	109.81	-
8.....	-	-	109.46	-	-	-	-	108.88	-	-	-	-
9.....	-	-	-	-	109.25	109.03	-	-	-	-	-	109.82
10.....	-	-	-	-	-	-	-	-	-	-	109.81	-
11.....	-	-	-	-	-	-	-	109.02	-	109.80	-	-
12.....	-	-	-	109.36	-	-	-	-	-	-	-	-
13.....	-	109.51	-	-	-	-	108.84	-	-	-	109.82	-
14.....	-	-	-	-	-	-	-	-	-	-	-	-
15.....	-	-	109.46	-	-	-	-	-	109.49	-	-	-
16.....	-	109.51	-	-	109.17	108.86	-	-	-	-	-	109.82
17.....	-	-	-	-	-	-	-	-	-	-	-	-
18.....	-	-	-	-	-	-	-	-	-	109.76	109.82	-
19.....	-	-	-	109.36	-	-	-	-	-	-	-	-
20.....	-	-	-	-	-	-	108.78	-	-	-	-	109.82
21.....	-	-	-	-	-	-	-	-	-	-	-	-
22.....	-	-	109.45	-	-	-	-	109.23	-	-	-	-
23.....	-	-	-	-	109.16	108.89	-	-	-	-	-	-
24.....	-	109.53	-	-	-	-	-	-	-	-	-	-
25.....	109.57	-	-	-	-	-	-	-	-	-	109.82	-
26.....	-	-	-	109.33	-	-	-	-	-	-	-	109.81
27.....	-	-	-	-	-	-	108.82	109.35	-	109.78	-	-
28.....	-	-	-	-	-	-	-	-	-	-	-	-
29.....	-	-	109.45	-	-	-	-	-	109.51	-	-	-
30.....	-	-	-	-	-	108.87	-	-	-	109.83	-	-
31.....	-	-	-	-	-	-	-	-	-	-	109.82	-

 MISCELLANEOUS DISCHARGE MEASUREMENTS MADE IN REINDEER RIVER TRIBUTARY BASIN
FOR THE YEAR 1958

Date	Stream	Location	Discharge cfs
24 Feb.	Cochrane River	Below Bigstone Rapids	1,870b
21 Aug.	"	"	3,380

b - Ice conditions.

SEAL RIVER DRAINAGE BASIN

 MISCELLANEOUS DISCHARGE MEASUREMENTS MADE IN SEAL RIVER BASIN
FOR THE YEAR 1958

Date	Stream	Location	Discharge cfs
22 Feb.	Seal River	Below Great Island, Manitoba	4,420b
21 June	"	"	19,700
15 Aug.	"	"	14,800
24 Sept.	"	"	14,800

b - Ice conditions.

MACKENZIE RIVER BASIN

MACKENZIE RIVER AT SIMPSON - STATION No. 10GC₁

Location: Lat. 61° 52', long. 121° 21', Northwest Territories, near R.C.M.P. Post in lot 14 at Simpson and about one mile below mouth of Liard River. Gauge: Staff. Period of Record: Gauge heights only during open water 1938 to date. Extremes Recorded: Daily - Maximum, during 1957 spring break-up, about 37 feet, Minimum, 30 and 31 October 1943, -0.70 feet. Remarks: Gauge heights are referred to standard iron bench mark 72.8 feet shoreward from top of river bank and 33.5 feet southeast along boundary line from the northwest corner of lot 14, gauge height 44.48 feet. The approximate elevation of the gauge datum is 369 feet.

Daily Gauge Heights in Feet for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	-	-	-	12.18	9.78	8.55	7.83	-	-
2.....	-	-	-	-	-	-	12.26	9.73	8.53	7.71	-	-
3.....	-	-	-	-	-	-	12.06	9.63	8.44	7.63	-	-
4.....	-	-	-	-	-	-	12.03	9.58	8.41	7.56	-	-
5.....	-	-	-	-	-	13.13	12.01	9.58	8.36	7.53	-	-
6.....	-	-	-	-	-	13.18	12.03	9.58	8.28	7.49	-	-
7.....	-	-	-	-	-	13.28	11.98	9.58	8.28	7.78	-	-
8.....	-	-	-	-	-	13.78	11.83	9.63	8.38	7.83	-	-
9.....	-	-	-	-	-	14.03	11.71	9.56	8.10	7.83	-	-
10.....	-	-	-	-	-	14.33	11.76	9.86	8.31	7.83	-	-
11.....	-	-	-	-	-	14.28	11.73	9.97	8.36	7.78	-	-
12.....	-	-	-	-	-	14.08	11.87	10.13	8.33	7.78	-	-
13.....	-	-	-	-	-	14.03	12.15	10.18	8.31	7.83	-	-
14.....	-	-	-	-	-	13.58	13.12	10.00	8.38	7.82	-	-
15.....	-	-	-	-	-	13.43	13.02	9.80	8.42	7.81	-	-
16.....	-	-	-	-	-	13.13	12.85	9.68	8.38	7.80	-	-
17.....	-	-	-	-	-	12.98	12.70	9.48	8.36	7.80	-	-
18.....	-	-	-	-	-	12.88	12.48	9.28	8.31	7.78	-	-
19.....	-	-	-	-	-	12.68	12.21	9.08	8.38	7.76	-	-
20.....	-	-	-	-	-	12.58	11.78	8.98	8.40	7.74	-	-
21.....	-	-	-	-	-	12.48	11.60	8.91	8.42	7.71	-	-
22.....	-	-	-	-	-	12.43	11.33	8.98	8.42	7.70	-	-
23.....	-	-	-	-	-	12.38	10.93	9.08	8.38	-	-	-
24.....	-	-	-	-	-	12.28	10.86	8.88	8.36	-	-	-
25.....	-	-	-	-	-	12.18	10.78	8.86	8.33	-	-	-
26.....	-	-	-	-	-	12.13	10.68	8.73	8.33	-	-	-
27.....	-	-	-	-	-	12.03	10.55	8.58	8.13	-	-	-
28.....	-	-	-	-	-	12.08	10.43	8.48	8.08	-	-	-
29.....	-	-	-	-	-	12.23	10.35	8.48	8.03	-	-	-
30.....	-	-	-	-	-	12.23	10.23	8.56	7.92	-	-	-
31.....	-	-	-	-	-	-	10.08	8.55	-	-	-	-

MACKENZIE RIVER AT NORMAN WELLS - STATION No. 10KA₁

Location: Lat. 65° 16' 54", long. 126° 50' 58", Northwest Territories. Gauge: Staff. Period of Record: Elevations only during open-water seasons 1943 to 1956; no records were obtained for 1957 and 1958. Extremes Recorded: Maximum, 9 May 1946, 297.6 feet, Minimum, 7 November 1945, 258.7 feet. Remarks: Record supplied by Imperial Oil Co. Ltd. officials. Elevations are referred to top of 2-inch pipe elbow on top of Imperial Oil well No. 3, elevation 307.44 feet (assumed). Records were collected at the Bear River dock at Norman, about one-quarter mile above the Mackenzie River, for the period 1938 to 1945 and were published under the title: "Mackenzie River at Norman".

MISCELLANEOUS DISCHARGE MEASUREMENTS MADE IN MACKENZIE RIVER DRAINAGE BASIN

Date	Stream	Location	Discharge cfs
1958 14 to 17 March	MacKenzie River	Near Fort Providence	74,750b
1954 8 May 13 May	MacKenzie River, Peel Channel " East Channel	Lat. 68° 10' long. 135° 10' Lat. 68° 10' long. 133° 57'	1,130* 252*

* This is a revision to discharge as published in Water Resources Paper No. 117.

b - Ice conditions.

ATHABASCA RIVER AT ENTRANCE - STATION No. 7AD₁

Location: Lat. 53° 22' 40", long. 117° 41' 40", in NE. 1/4 sec. 1, tp. 51, rge. 26, W. 5th Mer., Alberta, on abandoned Canadian National Railways bridge about six miles downstream from Brule Lake and one-half mile north of Entrance. Drainage Area: 3,915 square miles. Gauge: Wire-weight. Measurement of Discharge: From cableway. Period of Record: Periods of varying length 1915 to 1939 and 1955 to date. Prior to 1 December 1917, records were obtained about two miles downstream and below the mouth of Prairie Creek and were published under the title "near Hinton" until October 1918. Average Discharge: (25 years) - 6,607 cfs. Extremes Recorded: Daily - Maximum, 17 June 1933, 53,100 cfs, Minimum, 26 and 27 April 1937, 250 cfs. Remarks: Records good during open-water periods and fair during ice periods.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	5,280	3,390	1,490		610	1,260	1,230	1,400	24,430	22,080	14,590	9,740
2.....	5,380	2,710	1,170		731	1,010	1,230	1,650	22,000	20,420	13,020	8,690
3.....	6,070	2,540	1,490		720	852	1,260	1,790	24,100	19,310	11,410	9,770
4.....	4,900	2,350	1,440		764	964	1,570	1,840	23,380	17,580	11,870	8,850
5.....	5,010	2,540	1,410		830	1,040	2,000b	2,100	19,760	17,340	10,940	7,740
6.....	4,160	2,870	1,310		852	952	1,510	2,250	19,600	16,380	11,680	7,160
7.....	4,150	2,730	1,340	1,160	940	1,010	1,520	2,570	20,670	15,370	10,970	6,970
8.....	3,970	2,040	1,380		907	797	1,580	3,420	21,580	15,090	12,410	7,350
9.....	4,000	2,160	1,810		929	852	1,500	4,240	22,000	14,670	11,590	7,690
10.....	3,810	2,410	1,350		907	929	1,330	5,450	22,840	14,670	11,000	6,540
11.....	3,780	2,760	1,270		1,060	1,230	1,390	5,290	22,880	15,050	10,860	8,420
12.....	3,740	2,520	1,260		1,110	1,180	1,470	5,070	19,520	16,500	10,890	8,980
13.....	3,660	2,570	1,570		1,070	1,170	1,580	5,030	15,950	17,340	11,260	9,720
14.....	4,090	2,550	1,110	1,240	976	731	1,720	4,410	15,250	14,670	10,830	10,920
15.....	4,220	2,180	1,060	1,190	753	720	1,820	4,850	16,300	12,150	10,580	9,000
16.....	3,840	2,100b	1,060	1,340	1,070	720	1,420	6,030	16,420	11,840	11,410	7,590
17.....	3,640	988b	1,060	1,670	1,050	753	1,270	7,350	15,370	13,050	11,150	6,970
18.....	3,570	907b		1,450	964	929	1,180	7,890	15,560	13,650	11,410	7,840
19.....	3,450	988b		1,270	874	1,120	1,300	8,220	16,540	14,590	11,180	7,140
20.....	3,110	2,020b		1,020	1,060	964	1,180	9,420	16,260	14,670	11,440	6,510
21.....	2,620b	1,580b		1,140	1,310	841	1,250	12,640	15,130	14,740	10,720	6,190
22.....	2,300b	2,040b		976	1,530	720	1,300	16,340	15,210	15,480	11,120	5,590
23.....	2,220b	2,570		830	1,410	929	1,230	19,970	16,500	16,740	10,660	5,640
24.....	2,120b	2,920	1,020	929	1,140	885	1,300	21,490	17,900	15,480	10,770	4,780
25.....	2,440	3,000		1,010	1,130	775	1,870	22,840	18,100	13,800	10,690	4,960
26.....	3,270	2,760		940	1,260	964	1,270	24,220	18,620	13,880	11,740	4,200
27.....	3,570	2,700		885	1,230	964	1,210	24,140	20,010	12,740	13,120	4,160
28.....	3,280	2,020		863	1,160	1,160	1,230	23,130	21,620	13,080	11,060	4,350
29.....	2,980	1,310b		1,040	-	907	1,250	23,590	26,540	13,440	9,000	4,810
30.....	3,160	1,380		1,170	-	1,060	1,270	27,270	25,240	12,880	9,370	4,650
31.....	3,000	-		819	-	1,160	-	27,350	-	13,120	8,540	-
Mean	3,703	2,253	1,189	1,125	1,012	953	1,408	10,750	19,510	15,220	11,200	7,097
Per sq. mi.	0.95	0.58	0.30	0.29	0.26	0.24	0.36	2.75	4.98	3.89	2.86	1.81
Acre-feet in 1,000	227.7	134.1	73.11	69.15	56.23	58.61	83.78	661	1,161	935.8	688.8	422.3

The Year..... Discharge: Daily - Maximum 31 May, 27,350
- Minimum 1 February, 610

Mean 6,314; Per Square Mile 1.61

Runoff: Acre-feet 4,572,000; Depth in inches on drainage area 21.89

b - Ice conditions 29 November to 5 April and as indicated.

e - Estimated.

Gauge heights from graph of observed readings 27 June to 2 July.

Location: Lat. 54° 43' 20", long. 113° 17' 10", in SE. 1/4 sec. 20, tp. 66, rge. 22, W. 4th Mer., Alberta. Drainage Area: 29,643 square miles. Gauge: Tape-weight. Measurement of Discharge: From bridge. Period of Record: Continuous May 1913 to April 1931, May 1951 to date; mainly May to October 1938 to 1950; miscellaneous measurements during winter of 1912-13. Average Discharge: (23 years) - 15,080 cfs. Extremes Recorded: Daily - Maximum, 10 June 1954, 192,300 cfs, Minimum, 14 December 1956, 1,610 cfs; Instantaneous Maximum - 2 to 3 p.m., 10 June 1954, 199,600 cfs. Remarks: Records good during open-water periods and fair during ice periods. Daily discharges for 1938 to 1951 are published in W.R.P. 113.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	12,100	13,870	7,260	5,300	4,580	4,710	4,580	15,470	35,900	77,140	18,090	14,320
2.....	12,360	14,060	10,140	5,320	4,730	4,890	4,670	15,630	41,500	79,990	18,000	13,190
3.....	12,470	14,400	8,450	5,100	4,690	4,920	4,800	16,820	42,510	67,660	17,740	12,690
4.....	12,690	15,400	6,800	4,870	4,690	4,890	4,870	18,140	38,720	63,000	18,440	12,120
5.....	12,730	15,400	7,110	4,940	4,730	4,870	5,150	20,360	36,610	55,170	18,490	12,810
6.....	13,840	14,250	7,290	5,170	4,760	4,760	5,860	21,760	35,070	47,700	17,530	14,280
7.....	14,370	13,360	5,200	4,800	4,710	4,690	6,680	23,620	33,490	42,220	16,610	12,960
8.....	13,950	12,390b	4,960	4,800	4,690	4,620	8,160	25,090	32,420	38,860	16,280	11,780
9.....	12,800	11,880b	8,890	4,780	4,670	4,500	11,800	26,310	32,290	36,090	14,990	11,040
10.....	12,430	11,730b	3,630	4,870	4,650	4,520	14,480	27,020	32,230	32,230	14,050	10,310
11.....	12,500	11,080	5,940	4,800	4,620	4,540	16,940	28,350	33,050	30,060	15,230	9,820
12.....	12,100	10,930	6,810	4,870	4,620	4,560	17,280	28,900	32,420	28,350	16,080	9,960
13.....	11,950	10,000	6,860	4,920	4,560	4,520	19,840	29,140	32,670	26,660	15,110	10,780
14.....	12,240	10,430	5,400	4,980	4,580	4,480	19,190	29,440	31,980	26,310	14,910	12,200
15.....	12,800	11,880	6,360	4,920	4,670	4,430	24,930	31,670	29,500	26,900	15,070	12,690
16.....	13,990	11,080	6,860	4,940	4,620	4,410	25,330	30,180	26,310	27,740	14,870	12,580
17.....	15,400	9,660	6,360	4,890	4,560	4,390	28,760	26,780	24,010	25,840	14,750	12,840
18.....	16,980	9,860	6,450	4,960	4,600	4,290	34,600	24,460	23,960	22,700	14,670	13,970
19.....	17,770	8,550	6,300	4,820	4,600	4,290	30,040b	23,570	24,920	21,810	14,440	13,030
20.....	16,940	7,540	5,520	4,730	4,620	4,250	31,050	23,900	24,120	21,560	14,360	11,780
21.....	16,020	7,200	5,620	4,670	4,560	4,290	28,960	23,620	23,620	21,970	14,550	11,180
22.....	15,240	6,190	5,780	4,650	4,500	4,270	27,200	22,070	24,400	22,020	14,950	11,040
23.....	13,840b	6,270	5,220	4,710	4,500	4,040	27,020	22,070	24,400	21,810	14,630	10,560
24.....	12,800b	8,360	5,170	4,710	4,560	3,980	25,550	23,900	23,300	21,450	14,480	9,990
25.....	11,620b	9,300	5,270	4,800	4,580	4,090	24,010	29,570	22,390	21,300	13,850	9,640
26.....	8,660b	7,860	5,100	4,730	4,650	4,170	21,710	33,110	22,070	21,920	14,080	9,430
27.....	8,220b	9,580	4,980	4,650	4,730	4,210	20,210	34,870	23,300	21,920	14,010	9,230
28.....	8,290	10,900	5,340	4,560	4,730	4,270	18,140	35,130	23,790	20,070	13,890	8,660
29.....	9,170	12,580b	5,030	4,620	-	4,270	16,770	35,710	25,730	19,130	14,320	8,430
30.....	11,690	9,760	5,470	4,690	-	4,330	16,240	35,390	33,240	18,670	15,150	8,110
31.....	13,540	-	5,470	4,620	-	4,480	-	34,680	-	18,050	15,830	-
Mean	12,950	10,860	6,163	4,845	4,634	4,449	18,160	26,350	29,660	33,110	15,470	11,380
Per sq. mi.	0.44	0.37	0.21	0.16	0.16	0.15	0.61	0.89	1.00	1.12	0.52	0.38
Acre-feet in 1,000	796.4	646.1	378.9	297.9	257.4	273.6	1,081	1,620	1,765	2,036	951.0	677.2

The Year..... Discharge: Daily - Maximum 2 July, 79,990
 - Minimum 10 December, 3,630
 Instantaneous Maximum 11 p.m., 1 July, 84,870
 Mean 14,890; Per Square Mile 0.50
 Runoff: Acre-feet 10,780,000; Depth in inches on drainage area 6.82

b - Ice conditions 29 November to 19 April and as indicated.
 Gauge heights from graph of observed readings 10 to 19 April and 29 June to 4 July.

Location: Lat. 56° 44' 00", long. 111° 22' 30", in SW. 1/4 sec. 21, tp. 89, rge. 9, W. 4th Mer., Alberta, on the Snye, near the end of the Snye road and about one mile from Post Office at McMurray. Gauge: Staff. Period of Record: Elevations only for periods of varying length during open water, 1937 to date. Extremes Recorded: Daily - Maximum, 11 June 1954, 800.18 feet, Minimum, 11 October 1943, 787.96 feet. Remarks: Data as formerly published may be converted to elevations in feet by the addition of 787.22 in 1937 and 692.12 in 1938 and 1939. Bench mark to which elevations are referred is top of NE. corner of base of historical monument near school in Fort McMurray, elevation 819.37 feet.

Daily Elevations in Feet for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	-	-	791.81	790.39	789.62	789.22	789.12	-	-
2.....	-	-	-	-	-	791.69	790.85	789.51	789.34	789.07	-	-
3.....	-	-	-	-	-	791.78	793.72	789.46	789.25	789.10	-	-
4.....	-	-	-	-	-	792.07	-	789.57	789.11	788.96	-	-
5.....	-	-	-	-	-	791.96	-	789.71	789.01	788.99	-	-
6.....	-	-	-	-	-	791.74	-	789.71	788.98	789.00	-	-
7.....	-	-	-	-	-	791.68	-	789.82	788.91	789.11	-	-
8.....	-	-	-	-	-	791.51	791.73	789.83	789.11	789.06	-	-
9.....	-	-	-	-	-	791.36	791.44	789.72	789.05	789.01	-	-
10.....	-	-	-	-	-	791.30	791.23	789.71	788.95	788.96	-	-
11.....	-	-	-	-	-	791.24	791.06	789.53	788.81	788.95	-	-
12.....	-	-	-	-	-	791.24	790.78	789.32	788.72	788.99	-	-
13.....	-	-	-	-	-	791.26	790.60	789.30	788.73	789.01	-	-
14.....	-	-	-	-	-	791.18	790.46	789.43	788.84	789.00	-	-
15.....	-	-	-	-	792.13	791.16	790.39	789.39	789.06	788.95	-	-
16.....	-	-	-	-	792.13	791.11	790.48	789.30	789.12	788.92	-	-
17.....	-	-	-	-	792.15	790.96	790.41	789.23	789.29	788.88	-	-
18.....	-	-	-	-	792.00	790.76	790.43	789.22	789.38	788.86	-	-
19.....	-	-	-	-	791.75	790.56	790.28	789.22	789.48	788.90	-	-
20.....	-	-	-	-	791.53	790.55	790.02	789.18	789.57	788.88	-	-
21.....	-	-	-	-	791.38	790.57	789.93	789.12	789.65	788.96	-	-
22.....	-	-	-	-	791.40	790.51	789.89	789.14	789.55	788.97	-	-
23.....	-	-	-	-	791.34	790.42	789.92	789.12	789.47	789.00	-	-
24.....	-	-	-	-	791.22	790.42	789.90	789.17	789.45	788.99	-	-
25.....	-	-	-	-	791.14	790.41	789.87	789.16	789.45	788.95	-	-
26.....	-	-	-	-	791.29	790.33	789.86	789.15	789.40	788.85	-	-
27.....	-	-	-	-	791.33	790.21	789.87	789.13	789.32	788.81	-	-
28.....	-	-	-	-	791.83	790.16	789.91	789.11	789.27	788.80	-	-
29.....	-	-	-	-	791.87	790.23	789.93	789.09	789.21	788.75	-	-
30.....	-	-	-	-	791.85	790.26	789.77	789.10	789.17	788.71	-	-
31.....	-	-	-	-	791.83	-	789.63	789.08	-	788.68	-	-

ATHABASCA RIVER BELOW McMURRAY - STATION No. 7DA₁

Location: Lat. 56° 47', long. 111° 24', in NW. 1/4 sec. 5, tp. 90, rge. 9, W. 4th Mer., Alberta, about two miles below confluence with Clearwater River and six hundred feet upstream from mouth of Clark Creek. Drainage Area: 50,000 square miles. Gauge: Recording. Measurement of Discharge: From boat. Period of Record: October 1957 to date; miscellaneous measurements in summer of 1957. Extremes Recorded: Daily - Maximum, 3 July 1958, 83,920 cfs, Minimum, 18 February 1958, 5,690 cfs; Instantaneous Maximum - 3 p.m., 3 July 1958, 86,030 cfs. Remarks: Records excellent except during ice period or periods of no gauge-height record when they are fair.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	16,500	17,000	16,400	8,700	7,000	6,500	6,600	41,740	45,600	30,880	23,500	19,500
2.....	16,500	18,700	13,600	8,600	6,900	6,500	6,900	39,280x	44,400	45,250	22,900	20,200
3.....	16,500	19,000	11,100	8,400	6,800	6,500	7,100	37,200	45,100	83,920	22,900	18,600
4.....	16,800	19,100	13,900	8,500	6,900	6,700	7,400	36,200	50,200	76,750	22,900	17,600
5.....	17,200	19,300	12,200	8,200	6,900	6,700	7,600	36,800	51,000	68,700	22,900	17,100
6.....	17,500	20,300	10,600	7,900	6,900	6,700	7,800	37,600	47,000	64,600	23,500	16,500
7.....	17,700	20,200	10,800	8,000	6,800	6,700	8,600	39,500	44,600	56,140	23,700	17,100
8.....	18,900	19,000	11,000	8,100	6,800	6,700	10,400	40,500	43,000	49,780	23,000	18,500
9.....	19,060	18,100	8,900	7,700	6,600	6,600	12,700	42,000	41,300	45,410	21,900	17,200
10.....	19,180	17,100	8,600	7,600	6,500	6,500	16,200	43,200	40,210	42,580	21,600	15,900
11.....	18,540	16,600	6,320x	7,600	6,320	6,400	22,800	44,000	39,780	39,780	20,200	15,100
12.....	17,980	16,300	10,300	7,600	6,300	6,400	28,500	44,600	39,700	37,220	19,120	14,400
13.....	17,980	15,700	11,600x	7,600	6,200	6,400	33,900	46,060	40,120	34,880	20,100	13,900
14.....	18,370	15,500	11,400	7,600	6,100	6,500	37,300	46,060	39,610	33,260	20,900	14,300
15.....	18,660	14,500	10,500	7,580x	5,900	6,400	41,800	45,690	39,610	32,200	19,900	15,640x
16.....	19,240	14,800	9,000	7,600	5,800	6,400	43,200	46,060	38,940	31,780	19,770	16,460
17.....	19,830	16,300	10,000	7,600	5,800	6,400	50,900	47,380	36,980	31,920	19,650	17,700
18.....	20,680	15,400	10,500	7,500	5,690x	6,400	53,300	45,130	34,650	32,550	19,530	18,260
19.....	22,140	14,000	10,000	7,500	5,700	6,400	60,000	41,960	32,340	31,570	19,350	18,830
20.....	24,150	14,200	10,000	7,500	5,800	6,300	70,000	39,440	31,710	29,300	19,180	19,590
21.....	25,670	12,800	9,800	7,300	5,800	6,330x	63,000	38,110	32,340	27,670	18,940	20,190
22.....	24,300b	11,700	9,000	7,200	6,000	6,300	64,000	37,700	31,850	27,000	18,770	19,410
23.....	23,000	11,400	9,100	7,200	6,000	6,300	61,000	37,220	31,080	27,200	18,710	18,260
24.....	22,000	10,300	9,300	7,100	6,000	6,300	59,200	35,880	31,290	27,400	19,060	17,700
25.....	20,200	10,400	8,700	7,200	6,200	6,100	58,000	35,180	31,220	27,070	19,180	17,760
26.....	19,000	12,500	8,600	7,200	6,300	6,000	55,600b	36,420	30,320	26,800	18,830	17,260
27.....	17,600	13,300	8,700	7,200	6,400	6,100	53,000	40,550	29,300	26,730	18,480	16,620
28.....	14,600	11,900	8,500	7,100	6,400	6,300	49,700	43,940	28,760	26,670	18,600	16,360
29.....	13,900	13,600	8,400	7,000	-	6,400	47,700	45,780	29,300	27,000	18,500	16,050
30.....	13,900	14,900	8,600	6,900	-	6,400	44,210x	45,690	30,050	25,100	18,200	15,400
31.....	14,700	-	8,300	6,900	-	6,400	-	45,690	-	24,000	18,700	-
Mean	18,780	15,460	10,120	7,603	6,315	6,420	36,280	41,370	37,710	38,420	20,400	17,250
Per sq. mi.	0.38	0.31	0.20	0.15	0.13	0.13	0.73	0.83	0.75	0.77	0.41	0.34
Acre-feet in 1,000	1,155	920.1	622.3	467.5	350.7	394.8	2,159	2,544	2,244	2,363	1,254	1,026

The Year..... Discharge: Daily - Maximum 3 July, 83,920
 - Minimum 18 February, 5,690
 Instantaneous Maximum 3 p.m., 3 July, 86,030
 Mean 21,410; Per Square Mile 0.43
 Runoff: Acre-feet 15,500,000; Depth in inches on drainage area 5.81

b - Ice conditions 22 October to 26 April.

x - Manual gauge readings.

Discharge estimated during periods of no gauge-height record from monthly discharge measurements and comparison with hydrographs at adjacent stations.

Location: Lat. 52° 13' 10", long. 117° 14' 00", in SW. 1/4 sec. 33, tp. 37, rge. 23, W. 5th Mer., Alberta, immediately below outlet of lake at toe of glacier. Drainage Area: 11.4 square miles. Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: Part-year records, 1948 to date. Extremes Recorded: Daily - Maximum, 15 July 1955, 425 cfs, Minimum, 31 March and 1 April 1956, 0 cfs; Instantaneous Maximum - 7 p.m., 17 July 1955, 542 cfs. Revisions: 1948, W.R.P. 113; 1950, W.R.P. 117; drainage area, W.R.P. 121. Remarks: Records excellent during open-water period and fair during ice period.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	-	4b	27.7	50	248	137	12.7	-	-
2.....	-	-	-	-	4	27.3	56	223	63	16.7	-	-
3.....	-	-	-	-	4	29.8	71	188	48.5	24.3	-	-
4.....	-	-	-	-	4	36.3	76	136	46.3	21.9	-	-
5.....	-	-	-	-	4	36.8	58	146	63	27.0	-	-
6.....	-	-	-	-	4	39.1	55	248	91	21.9	-	-
7.....	-	-	-	-	4	39.5	63	256	125	18.3	-	-
8.....	-	-	-	-	23b	42.4	70	218	144	16.7	-	-
9.....	-	-	-	-	44.3	49.8	82	209	188	14.2	-	-
10.....	-	-	-	-	35.9	43.3	102	225	182	11.9	-	-
11.....	-	-	-	-	34.3	30.5	119	216	164	11.1	-	-
12.....	-	-	-	-	31.2	30.1	125	234	152	20.7	-	-
13.....	-	-	-	-	18.9	35.5	138	218	114	21.3	-	-
14.....	-	-	-	-	19.5	42.8	140	218	53	19.5	-	-
15.....	-	-	-	-	28.4	41.2	182	210	41.3	18.9	-	-
16.....	-	-	-	-	25.6	39.9	238	230	62	13.7	-	-
17.....	-	-	-	-	22.5	41.8	254	254	66	11.9	-	-
18.....	-	-	-	-	19.5	45.4	266	226	35.9	12.3	-	-
19.....	-	-	-	-	20.7	42.3	265	231	25.6	12.3	-	-
20.....	-	-	-	-	29.4	43.8	275	206	21.3	9.9	-	-
21.....	-	-	-	-	33.5	50	292	230	19.5	8.7	-	-
22.....	-	-	-	-	51	72	322	210	16.7	7.8	-	-
23.....	-	-	-	-	58	76	229	198	15.2	7.2	-	-
24.....	-	-	-	-	51	80	215	224	13.7	6.9	-	-
25.....	-	-	-	-	51	95	227	256	12.3	6.3	-	-
26.....	-	-	-	-	43.3	95	209	267	11.9	6.0	-	-
27.....	-	-	-	-	40.4	86	234	134	13.7	5.7	-	-
28.....	-	-	-	-	48.0	57	245	117	19.5	5.5	-	-
29.....	-	-	-	-	47.4	41.3	240	105	17.2	5e	-	-
30.....	-	-	-	-	31.9	42.3	274	99	13.7	5e	-	-
31.....	-	-	-	-	25.6	-	298	120	-	5e	-	-
Mean	-	-	-	-	27.8	48.7	176	203	65.9	13.1	-	-
Per sq. mi.	-	-	-	-	2.44	4.27	15.44	17.81	5.78	1.15	-	-
Acre-feet	-	-	-	-	1,710	2,900	10,850	12,500	3,920	806	-	-

The Period..... Discharge: Daily - Maximum 22 July, 322
 (184 days) - Minimum 1 to 7 May, 4
 Instantaneous Maximum 4 p.m., 21 July, 383
 Mean 89.5; Per Square Mile 7.85
 Runoff: Acre-feet 32,690; Depth in inches on drainage area 53.75

b - Ice conditions 1 to 8 May.

e - Estimated.

MCLEOD RIVER ABOVE EMBARRAS RIVER - STATION No. 7AF₂

Location: Lat. 53° 28', long. 116° 38', in SE, 1/4 sec. 7, tp. 52, rge. 18, W. 5th Mer., Alberta, about one mile above confluence with Embarras River, near Canadian National Railways McLeod River depot and six miles south of Bickerdike. Drainage Area: 1,000 square miles. Gauge: Wire-weight. Measurement of Discharge: From bridge. Period of Record: November 1954 to date. Extremes Recorded: Daily - Maximum, 29 June 1958, 13,060 cfs, Minimum, 2 January 1955, 51 cfs. Remarks: Records good during open-water periods and fair during ice period.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	457	1,010	304	231	194	127	140	986	1,580	8,260	466	235
2.....	486	819	304	236	202	121	176	1,280e	1,950	7,480	451	254e
3.....	580	739	304	236	204	117	182	1,580e	2,350	5,650	461	274
4.....	564	712	300	242	202	110	204	1,880e	2,170e	4,390	442	308
5.....	54	686	452	245	187	102	228	2,180	1,990	3,470	404e	323
6.....	548	660	457	245	169	94	242	1,770	1,770e	2,990	365	298
7.....	537	620	416	253	166	94	259	2,280	1,560e	2,580	353	268e
8.....	543	614	375	256	164	91	279	2,650e	1,340	2,000	342	238
9.....	486	1,010	334	253	162	93	264	3,020	1,290	1,740	327	229
10.....	476	620	294	250	146	95	279	2,700e	1,160e	1,580	327	223
11.....	457	580	288	242	148	96	522	2,390	1,030	1,410e	316	220
12.....	501	557	264	234	151	91	1,580	2,130	1,010	1,240	298	213
13.....	625	534	239	231	153	88	1,630	2,020	993	1,210	291	240
14.....	860e	511	247	209	140	84	1,980	1,930	966	1,160	282e	565
15.....	1,100e	476	227	187	132	84	1,300	1,710	920	1,140e	274	539
16.....	1,330	416	207	179	125	85	1,680	2,070	882e	1,120	262	462e
17.....	1,270	348	187	171	123	95	1,730	1,870e	843	1,000	255	386
18.....	941	358	187	182	117	98	1,980	1,670	818	946	246	398
19.....	739	367	194	194	110	102	1,920	1,470	837	879e	240	433
20.....	467	273	204	192	109	106	904	1,720	846e	812	229	398
21.....	458e	239	204	194	104	109	915b	1,800	856	787e	226	407
22.....	448b	169	210	182	106	112	946	1,970	843	761e	223	342
23.....	300	239	194	178	104	112	874	2,060	742e	735e	222e	302
24.....	402	273	185	172	107	115	772	1,760	642	709e	220	305
25.....	505	285	190	166	109	125	670	1,580	603	683e	210	291e
26.....	607	314	204	169	115	123	494	1,540	676	658	249	277e
27.....	710	318	223	166	121	128	535	1,390	2,260	630	265	263e
28.....	812	323	220	162	125	132	576	1,310	7,720	608	252e	249e
29.....	948	307	226	181	-	129	636	1,370e	13,060	581	240	235
30.....	1,090	320	223	200	-	134	739	1,430	8,780	544	249	249
31.....	1,200	-	226	197	-	137	-	1,970	-	499	238	-
Mean	677	490	261	208	143	107	821	1,854	2,083	1,879	298	314
Per sq.mi.	0.68	0.49	0.26	0.21	0.14	0.11	0.82	1.85	2.08	1.88	0.30	0.31
Acre-feet	41,640	29,150	16,040	12,760	7,920	6,600	48,860	114,000	123,900	115,500	18,300	18,690

The Year..... Discharge: Daily - Maximum 29 June, 13,060
 - Minimum 14 and 15 March, 84
 Mean 765; Per Square Mile 0.76
 Runoff: Acre-feet 553,400; Depth in inches on drainage area 10.38

b - Ice conditions 22 October to 21 April. e - Estimated.
 Gauge heights from graph of observed readings 26 June to 4 July.

Location: Lat. 53° 39' 15", long. 116° 16' 50", in NW, 1/4 sec. 10, tp. 54, rge. 16, W. 5th Mer., Alberta, about two miles below mouth of Wolf Creek and about seven miles northeast of Edson. **Drainage Area:** 2,510 square miles. **Gauge:** Recording. **Measurement of Discharge:** From cableway. **Period of Record:** Continuous May 1914 to November 1923 and October 1957 to date; miscellaneous measurements in 1913 and 1914 and part-year records from 1924 to 1931; estimated peak discharge in 1954. Prior to 1957, records were obtained from staff gauge in NW, 1/4 sec. 3. Prior to 1919, records were published under the title "near Thornton". **Average Discharge:** (12 years) - 1,233 cfs. **Extremes Recorded:** Daily - Maximum, 27 June 1915, 33,688 cfs, Minimum, 6 and 7 March 1923, 3.4 cfs; Instantaneous Maximum - 8 June 1954, 80,000 cfs (estimated from slope-area determination of discharge above Wolf Creek). **Revisions:** Drainage area, 1919 Report; April 1920 mean discharge was published in error in W.R.P. 31 and should be 391 cfs. **Remarks:** Records good during open-water periods and fair during ice periods. Maximum discharge during 1954, at highway crossing four miles east of Edson, was 75,000 cfs by slope-area determination. It is known that a high discharge occurred in 1944 but is believed to have been below the 1954 peak.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	830	1,480	784	256	358	350	350	2,500	4,280	18,800	1,390	430
2.....	869	1,410	673	336	366	350	366	3,630	4,460	17,210	1,360	422
3.....	1,040	1,220	684	336	366	343	382	4,170	5,240	14,470	1,350	414
4.....	1,410	1,100	796	350	374	336	390	4,150	4,900	10,130	1,310	430
5.....	1,200b	1,000	856	350	374	343	406	4,560	4,300	8,000	1,300	515
6.....	1,100	947	582	366	382	358	430	4,850	3,890	7,300	1,220	472
7.....	1,280	974	684	374	374	358	422	4,460	3,120	6,670	1,190	456
8.....	1,280	921	498	398	366	343	438	4,850	2,900	5,810	1,140	406
9.....	1,140	843	591	406	366	329	464	4,980	2,550	5,110	1,120	374
10.....	1,070	761	515	414	374	336	515	5,340	2,220	4,560	1,120	358
11.....	1,140b	830	610	414	374	343	694	5,060	1,980	4,120	1,090	350
12.....	1,350	761	652	406	358	336	1,450	4,900	1,820	3,810	1,070	382
13.....	1,540	704	620	398	358	336	1,700	5,660	1,670	3,730	1,060	406
14.....	1,740	662	652	390	358	336	1,950	5,010	1,500	3,550	1,040	464x
15.....	2,290	662	652	390	343	336	2,200	4,360	1,450	3,400x	1,000	974
16.....	2,530	673	610	374	343	336	2,450	3,990	1,390	3,170	960	856
17.....	2,450	553	694	343	343	336	1,960	4,020	1,360	3,000	908	738
18.....	1,920	430	694	322	350	329	2,130	3,600	1,250	2,820	882	662
19.....	1,610	662	534	329	329	328	2,920b	2,720	1,330	2,600	856	591
20.....	1,390	807	456	329	343	327	3,400	2,740	1,310	2,380	715	534
21.....	1,310	738x	464	322	336	327	3,340	2,900	1,310	2,160	570e	515
22.....	895b	784	358	322	329	326	3,370	3,070	1,240	2,050		524
23.....	506	582	402	322	322	325	3,040	3,020	1,130	2,020		515
24.....	572	631	447	315	322	324	2,600	3,170	1,020	2,090		506
25.....	750	908	390	322	322	324	2,380	2,770	934	1,960		490
26.....	1,040	988	329	322	336	323	2,050	2,530	882	1,800x	434	447
27.....	1,130	1,030	336	329	336	322	1,980	2,250	1,000	1,720	358	430
28.....	1,020	818	343	336	343	322	1,940	3,040	5,720	1,670	382	422
29.....	934	934	262	343	-	315	1,840	2,770	18,470	1,630	498	414
30.....	921	704	336	343	-	329	1,840	2,870	23,320	1,500	506	406
31.....	1,190	-	262	350	-	336	-	3,400	-	1,450	481	-
Mean	1,272	851	541	352	352	334	1,647	3,785	3,598	4,861	890	497
Per sq. mi.	0.51	0.34	0.22	0.14	0.14	0.13	0.66	1.51	1.43	1.94	0.35	0.20
Acre-feet	78,240	50,610	33,250	21,630	19,530	20,550	97,980	232,700	214,100	298,900	54,720	29,560

The Year.....Discharge: Daily - Maximum 30 June, 23,320
- Minimum 1 January, 256

Mean 1,591; Per Square Mile 0.63

Runoff: Acre-feet 1,152,000; Depth in inches on drainage area 8.60

b - Ice conditions 5 to 11 October and 22 October to 19 April.

e - Estimated.

x - Manual gauge readings 21 November to 15 July and 26 July to 14 September.

Gauge heights from graph of observed readings 27 June to 2 July.

WOLF CREEK AT No. 16 HIGHWAY CROSSING - STATION No. 7AG₃

Location: Lat. 53° 36', long. 116° 16', in NE. 1/4 sec. 22, tp. 53, rge. 16, W. 5th Mer., Alberta, about two and one-half miles above confluence with McLeod River and six miles east of Edson. Drainage Area: 350 square miles. Gauge: Wire-weight. Measurement of Discharge: From cableway or by wading. Period of Record: November 1954 to date. Extremes Recorded: Daily - Maximum, 29 June 1958, 2,840 cfs (an appreciably higher discharge is known to have occurred during the flood of June 1954), Minimum, 4 September 1955, 3.9 cfs. Remarks: Records fair.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	140e	372	50	46	45	21	17	320	77	1,650	25.0	28.3
2.....		357	49	33	41	20	17	345	93	1,170	24.0	31.6
3.....		314	48	33	37	20	17	420	111	849	28.4e	30.5
4.....		274	47	41	37	20	17	457	106	583	32.7	28.3
5.....		245	46	34	42	23	19	446	87	438	27.2	29.4
6.....		230	45	34	31	24	20	402	79	379e	24.0	26.1
7.....		188	44	37	36	22	23	348	66	320	22.0	25.0
8.....		168	46	36	27	21	14	313	62	262	22.0	24.0
9.....		98		44	25	23	13	287	58	214	24.0	20.0
10.....		89		42	25	22	20	264	61	161	30.5	18.0
11.....	216b	82	47	37	32	20	40	248	59	154	30.5	20.0
12.....		80		46	24	22	33	342	62	150	27.2	21.0
13.....		76		36	25	22	94	559	61	176	27.2	32.7
14.....		74		36	25	22	86	442	56	172	21.0	34.9
15.....		71	56	31	25	23	239	323	55	163	18.0	58
16.....		70		23	23	23	560b	259	54	144	17.0	54
17.....		65		17	20	23	670	238	51	115	15.0	48.0
18.....		59		17	19	25	670	186	51	98	14.3	39.6
19.....		54		22	20	23	543	150	59	77	12.2	36.0
20.....		55		20	22	23	499	135	71	79	12.9	34.9
21.....	175	56	66	21	22	23	453	125	70	68	12.9	39.6
22.....		80		23	23	25	480	107	61	66	12.9	33.8
23.....		76		24	22	23	361	154	62	58	12.2	34.9
24.....		74		27	22	24	310	100	42.0	51	12.2	36.0
25.....		188	66	24	21	21	272	87	34.9	44.4	11.5	37.2
26.....		233		29	23	20	267	77	29.4	42.0	19.0	38.4
27.....		546		32	23	19	329	68	90	39.6	18.0	37.2
28.....		213		34	20	20	267	59	1,470	32.7	21.0	42.0
29.....		183		38	-	19	259	55	2,840	31.6	23.0	40.8
30.....		173		45	-	17	307	65	2,320	30.5	29.4	40.8
31.....		175		44	-	25	-	70	-	28.3	25.0	-
Mean	166e	122	50.8	32.5	27.0	21.9	231	240	280	253	21.0	34.0
Per sq. mi.	0.47	0.35	0.15	0.09	0.08	0.06	0.66	0.69	0.80	0.72	0.06	0.10
Acre-feet	10,210	7,260	3,120	2,000	1,500	1,340	13,720	14,780	16,660	15,560	1,290	2,030

The Year..... Discharge: Daily - Maximum 29 June, 2,840

- Minimum 25 August, 11.5

Mean 124; Per Square Mile 0.35

Runoff: Acre-feet 89,470; Depth in inches on drainage area 4.79

b - Ice conditions 24 October to 16 April.

e - Estimated.

Gauge heights from graph of observed readings 27 June to 2 July.

Location: Lat. 53° 07' 50", long. 115° 19' 00", in NW. 1/4 sec. 7, tp. 48, rge. 9, W. 5th Mer., Alberta, about two miles below confluence with Paddy Creek and three miles north of Lodgepole. Drainage Area: 1,112 square miles (revised). Gauge: Wire-weight. Measurement of Discharge: From bridge or by wading. Period of Record: Part-year records 1956 to date. Extremes Recorded: Daily - Maximum, 30 June 1958, 6,000 cfs (estimated), Minimum, 1 to 11 April 1956, 50 cfs. Remarks: Records fair.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	92b	88	1,200e	599	3,300e	150e		170	-	-
2.....	-	-	92	90		590			166	-	-	
3.....	-	-	92	94		566			162	-	-	
4.....	-	-	92	106	585	160	-		-			
5.....	-	-	91	114	1,970	604	160		-	-		
6.....	-	-	90	114	2,150	653	1,400e	270e	156	-	-	
7.....	-	-	89	117	2,270	687			156	-	-	
8.....	-	-	88	103	2,300	700e			150	-	-	
9.....	-	-	88	121	2,500				148	-	-	
10.....	-	-	87	111	2,530				147	-	-	
11.....	-	-	86	152	2,610	628	1,100e	170e	148	-	-	
12.....	-	-	85	158	2,720			164e	152	-	-	
13.....	-	-	84	265	2,190			182e	154	-	-	
14.....	-	-	83	619	1,960			213e	158	-	-	
15.....	-	-	82	750	1,850			314e	164	-	-	
16.....	-	-	81	942	1,820	600e	750e	284e	162	-	-	
17.....	-	-	81	1,620	1,780			268	160	-	-	
18.....	-	-	80	1,310	1,730			336	158	-	-	
19.....	-	-	79	1,360	1,720			242	160	-	-	
20.....	-	-	79	1,560b	1,700			239	156	-	-	
21.....	-	-	78	1,440	1,680	1,480	550e	182	142	-	-	
22.....	-	-	77	986	1,670			216	145	-	-	
23.....	-	-	78	928	1,660			170	148	-	-	
24.....	-	-	78	902	1,650			171	150	-	-	
25.....	-	-	77	881	1,330			166	148	-	-	
26.....	-	-	79	758	1,550	1,330	450e	164	120	-	-	
27.....	-	-	93	900e	1,070	1,320		170	104	-	-	
28.....	-	-	81	1,200e	687	562		162	104	-	-	
29.....	-	-	83		653	3,500e		158	103	-	-	
30.....	-	-	84		643	6,000e		170	101	-	-	
31.....	-	-	84		-	623		-	103	-	-	
Mean	-	-	84.3	673	1,671	1,057e	1,232e	247e	188e	146	-	-
Per sq. mi.	-	-	0.08	0.61	1.50	0.95	1.11	0.22	0.17	0.13	-	-
Acre-feet	-	-	5,180	40,040	102,800	62,900	75,770	15,170	11,190	8,960	-	-

The Period..... Discharge: Daily - Maximum 30 June, 6,000e
 (245 days) - Minimum 22 and 25 March, 77
 Mean 663; Per Square Mile 0.60
 Runoff: Acre-feet 322,000; Depth in inches on drainage area 5.43

b - Ice conditions 1 March to 20 April.

e - Estimated.

Location: Lat. 53° 36' 00", long. 115° 00' 10", in SW. 1/4 sec. 29, tp. 53, rge. 7, W. 5th Mer., Alberta, at Alberta Highway No. 16 crossing between Entwistle and Evansburg, and about one-half mile above confluence with Lobstick River. Drainage Area: 1,706 square miles (revised). Gauge: Wire-weight. Measurement of Discharge: From cable-way or by wading. Period of Record: Continuous May 1914 to February 1923 and November 1954 to date; miscellaneous measurements in 1913 and 1914. Prior to 1954, records were collected about one-half mile upstream. Average Discharge: (11 years) - 616 cfs. Extremes Recorded: Daily - Maximum, 9 June 1914, 17,260 cfs, Minimum, Nil at various times during winter seasons in 1922 and 1923. Remarks: Records fair.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	311	610	300	118	71	175	237	1,120	1,700	6,670	364	169e
2.....	311	623	257	137	80	175	222	1,120	1,370	4,810	355e	157
3.....	317	623	278	156	80	209	227	1,140	1,770	3,360	346	160
4.....	388	630	227	57	145	278	232	1,520	1,860	2,700	292	163
5.....	431	617	232	44	145	346	247	1,810	1,630	2,240e	271	169
6.....	419	571	188	49	160	463	267	2,180	1,500	1,770	259	160
7.....	388	577	278	55	168	394	376	2,410	1,370	1,730	263	151
8.....	358	551	463	42	164	376	913	2,430	1,180	1,430	267	136
9.....	364	526	469	36	149	376	1,260	2,540	937	1,190	263	123
10.....	413	526	407	36	141	346	1,310	2,600	817	1,180	267	117
11.....	438	532	358	49	145	364	1,890	2,570	809	1,160	263	115
12.....	425	442b	400	55	118	145	2,200	2,400	772	1,130	267	123
13.....	456	351	346	53	102	115	2,320	2,110	721	1,140	275	128
14.....	520	260	289	71	118	118	2,390	1,970	615	1,120	279	189
15.....	584	168	322	94	124	94	1,790	1,920	627	996	279	220
16.....	643	78	317	121	108	188	1,950b	1,700	621	937	279	220
17.....	664	71	257	115	97	283	1,740	1,510	634	920	255	213
18.....	714	80	200	131	115	419	1,360	1,380	660	787	247	199
19.....	740	145	237	97	131	374	1,480	1,220	627	750	239	169
20.....	707	192	322	94	124	328	1,380e	1,110	595	640	220	169
21.....	686	257	340	88	94	306	1,270	1,090	571	577	220	154
22.....	209b	300	300	80	105	300	1,240	1,050	523	559	206	148
23.....	108	317	196	66	118	334	1,220	1,050	500	559	163	148
24.....	160	376	86	49	124	289	1,180	1,020	456	547	148	139
25.....	200	358	80	51	145	242	1,070e	970	1,030e	547	148	142
26.....	252b	444	73	50	145	179	962	928	1,600	529	172	139
27.....	513	431	66	49	149	183	1,000	937	1,860	500	176	139
28.....	571	334	78	66	168	152	1,180	779	3,690	451	182	142
29.....	577	328	35	55	-	164	1,150	728	4,050	435	192	136
30.....	610	294	28	57	-	156	1,130	856	7,140	394	195	131
31.....	597	-	100	78	-	156	-	1,510	-	389	182e	-
Mean	454	387	243	74.2	126	259	1,173	1,538	1,408	1,360	243	156
Per sq. mi.	0.27	0.23	0.14	0.04	0.07	0.15	0.69	0.90	0.83	0.80	0.14	0.09
Acre-feet	27,920	23,030	14,930	4,560	7,010	15,920	69,800	94,570	83,770	83,600	14,940	9,260

The Year..... Discharge: Daily - Maximum 30 June, 7,140

- Minimum 30 December, 28

Mean 621; Per Square Mile 0.36

Runoff: Acre-feet 449,300; Depth in inches on drainage area 4.94

b - Ice conditions 22 to 26 October, 12 November to 16 April.

e - Estimated.

Location: Lat. 54° 27' 05", long. 113° 59' 30", in NE. 1/4 sec. 15, tp. 63, rge. 27, W. 4th Mer., Alberta, at traffic bridge about one-half mile southeast of Jarvie. Drainage Area: 4,550 square miles. Gauge: Wire-weight. Measurement of Discharge: From bridge or by wading. Period of Record: Part-year records 1957 to date. Extremes Recorded: Daily - Maximum, 12 April 1958, 6,440 cfs, Minimum, 30 March 1958, 123 cfs. Remarks: Records good during open-water periods and fair during ice periods.

Daily Discharge in Cubic Feet per Second for Year 1957

Day	Aug.	Sept.	Oct.	Day	Aug.	Sept.	Oct.	Day	Aug.	Sept.	Oct.
1.....	-	617	459	11.....	-	660	562	21.....	-	704	686
2.....	-	781	453	12.....	-	866	531	22.....	-	648	611
3.....	-	749	442	13.....	-	800	519	23.....	-	629	781
4.....	-	692	453	14.....	-	788	617	24.....	-	592	720
5.....	-	635	344	15.....	-	762	635	25.....	886	568	660
6.....	-	623	406	16.....	-	704	673	26.....	820	543	730
7.....	-	617	501	17.....	-	654	698	27.....	762	537	768
8.....	-	568	586	18.....	-	673	686b	28.....	717	519	749
9.....	-	531	586e	19.....	-	820	717	29.....	686	507	768
10.....	-	501	586	20.....	-	768	698	30.....	642	477	794
								31.....	604	-	781b
Mean									-	651	619
Per sq. mi.									-	0.14	0.14
Acre-feet									-	38,740	38,080

The Period.....Discharge: Mean 635; Per Square Mile 0.14
(61 days) Runoff: Acre-feet 76,820; Depth in inches on drainage area 0.32

b - Ice conditions 18 to 31 October.

e - Estimated.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	167b	149	2,320	1,200	604	562	290	264	-	-
2.....	-	-	162	214	2,120	1,040	2,760	507	295	264	-	-
3.....	-	-	162	384	1,990	998	6,220	501	269	258	-	-
4.....	-	-	158	525	1,950	998	5,730	531	253	253	-	-
5.....	-	-	167	1,280	2,050	1,870	5,010	543	243	238	-	-
6.....	-	-	185	1,490	2,270	1,990	3,980	513	238	238	-	-
7.....	-	-	199	1,530	2,440e	2,020	3,190	465	233	233	-	-
8.....	-	-	204	2,800	2,600e	1,790	2,540	447	228	228	-	-
9.....	-	-	214	3,510	2,770e	1,620	2,120	424	233	233	-	-
10.....	-	-	224	4,700	2,940e	1,460	1,910	412	233	228	-	-
11.....	-	-	233	5,250	3,100e	1,300	1,760	395	228	224	-	-
12.....	-	-	209	6,440	3,270	1,170	1,590	372	238	219	-	-
13.....	-	-	209	6,420	3,120	1,090	1,430	366	269	214	-	-
14.....	-	-	199	5,190	2,890	998	1,330	361	300	209	-	-
15.....	-	-	224	5,720	2,710	985	1,210	350	295	219	-	-
16.....	-	-	233	6,070	2,690	971	1,180	344	284	228	-	-
17.....	-	-	228	6,210b	2,510	925	1,300	333	279	224	-	-
18.....	-	-	219	6,250	2,340	905	1,210	322	279	219	-	-
19.....	-	-	199	5,730	2,140	840	1,150	316	279	219	-	-
20.....	-	-	181	5,330	2,030	788	1,090	306	300	214	-	-
21.....	-	-	167	5,430	1,880	794	1,000	300	290	214	-	-
22.....	-	-	158	4,710	1,720	768	958	295	300	209	-	-
23.....	-	-	167	4,070	1,580	692	919	290	333	204	-	-
24.....	-	-	158	3,680	1,470	686	833	279	290	204	-	-
25.....	-	-	153	3,390	1,410	673	800	274	284	209	-	-
26.....	-	-	144	3,170	1,370	673	730	279	274	209	-	-
27.....	-	-	144	2,980	1,470	660	717	269	274	204	-	-
28.....	-	-	140	2,780	1,470	654	711	264	248	204	-	-
29.....	-	-	136	2,580	1,380	629	679	264	269	204	-	-
30.....	-	-	123	2,440	1,280	586	648	269	264	209	-	-
31.....	-	-	136	-	1,200	-	611	279	-	199	-	-
Mean	-	-	181	3,681	2,145	1,059	1,804	369	270	222	-	-
Per sq. mile	-	-	0.04	0.81	0.47	0.23	0.40	0.08	0.06	0.05	-	-
Acre-feet	-	-	11,110	219,000	131,900	63,020	110,900	22,680	16,050	13,680	-	-

The Period.....Discharge: Daily - Maximum 12 April, 6,440
(244 days) - Minimum 30 March, 123
Mean 1,211; Per Square Mile 0.27
Runoff: Acre-feet 588,300; Depth in inches on drainage area 2.42

b - Ice conditions 1 March to 17 April.
Gauge heights from graph of observed readings 2 to 5 July.

e - Estimated

Location: Lat. 53° 36' 45", long. 115° 06' 20", in NE. 1/4 sec. 28, tp. 53, rge. 8, W. 5th Mer., Alberta, about four miles above confluence with Pembina River, twelve miles downstream from Chip Lake and one mile north of Styal.
Drainage Area: 671 square miles. Gauge: Wire-weight. Measurement of Discharge: From bridge or by wading.
Period of Record: Continuous January 1955 to date; miscellaneous measurements in 1954. Extremes Recorded: Daily - Maximum, 16 April 1956, 662 cfs, Minimum, 11 December 1955 to 7 April 1956, Nil. Remarks: Records fair. During the period 1913 to 1923, data were collected at a site near the confluence with Pembina River, about four miles downstream and published under the title "Lobstick River near Entwistle".

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	82	122	260	148	144	89	91	255	96	298	71	70
2.....	89	122	207	150	150	92	84	276	114	250	74	60
3.....	111	104	257	150	148	78	78	253	118	230	71	50
4.....		119	241	146	132	78	103	262	114	214	71	39.3
5.....		119	209	144	159	69	124	264	105	183	94	37.0
6.....		119	99	130	134	96	244	267	103	155	77	40.1
7.....	130e	115	265	126	138	94	298	264	99	141	67	44.4
8.....		103	241	126	106	73	298	257	89	120	65	40.9
9.....		52	220	120	98	71	388	257	89	114	64	50
10.....		142	196	113	117	57	505	264	86	105	62	38.6
11.....		124	198	119	138	54	363	253	84	101	60	49.2
12.....		113	216	110	152	57	301	253	77	103	62	49.2
13.....		115	185	76	150	64	478	284	74	108	58	56
14.....		115	152	119	146	64	510b	246	72	118	63	65
15.....		117	154	128	84	27	391	230	72	101	63	53
16.....		115	122	108	113	68	358	234	71	94	63	27.4
17.....	b	82	152	111	132	59	340	250	68	89	63	26.9
18.....		144	150	103	128	47	322	216	70	88	63	37.8
19.....		172	159	111	134	64	315	198	74	80	63	40.9
20.....		165	146	122	128	73	303	183	64	78	63	39.3
21.....		248	146	130	124	91	300	187	64	77	64	45.4
22.....		272	154	126	120	28	293	172	64	75	65	47.2
23.....		386	140	140	126	86	288	187	63	77	63	54
24.....		146	150	117	119	91	288	176	58	77	60	52
25.....		111	134	136	115	119	281	162	53	77	64	51
26.....		108	126	142	134	101	274	185	49.2	74	64	62
27.....	111	101	146	132	146	119	77	272	139	59	74	65
28.....		117	150	136	140	104	74	281	127	83	72	64
29.....		117	69	138	146	-	77	262	118	185	71	58
30.....		122	91	161	138	-	78	269	120	262	68	62
31.....		122	-	150	167	-	64	-	110	-	67	72
Mean	123e	138	175	128	127	70.5	283	214	89.3	115	65.7	48.9
Per sq. mi.	0.18	0.21	0.26	0.19	0.19	0.11	0.42	0.32	0.13	0.17	0.10	0.07
Acre-feet	7,560	8,230	10,740	7,850	7,070	4,330	16,860	13,190	5,310	7,100	4,040	2,910

The Year..... Discharge: Daily - Maximum 14 April, 510

- Minimum 15 March, 27

Mean 131; Per Square Mile 0.20

Runoff: Acre-feet 95,190; Depth in inches on drainage area 2.66

b - Ice conditions 22 October to 14 April.

e - Estimated.

Location: Lat. 56° 40' 50", long. 111° 15' 00", in NW. 1/4 sec. 32, tp. 88, rge. 8, W. 4th Mer., Alberta, about ten miles above the confluence with Athabasca River near McMurray. Drainage Area: 9,380 square miles. Gauge: Recording. Measurement of Discharge: From cableway. Period of Record: Continuous December 1930 to April 1931, and August 1957 to date; miscellaneous measurements during June and July 1957. Prior to 1957, records were obtained in SE. 1/4 sec. 2, tp. 89, rge. 9, W. 4th Mer., and published under title "near Waterways". Extremes Recorded: Daily - Maximum, 20 April 1958, 20,000 cfs (estimated), Minimum, 1 April 1931, 1,400 cfs. Remarks: Records good during open-water periods and fair during ice period.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	2,280	2,900	2,700	2,300	1,750	1,700	1,800	13,980	6,240	3,140	2,360	2,380
2.....	2,330	2,900	2,700	2,200	1,750	1,700	1,800	13,320	6,030	3,040	2,320	2,400
3.....	2,380	2,900	2,700	2,200	1,700	1,700	1,800	12,750	5,900	3,020	2,300	2,420
4.....	2,490	2,900	2,700	2,200	1,700	1,700	1,900	12,220	5,720	2,990	2,510	2,460
5.....	2,700	2,900	2,700	2,100	1,700	1,700	1,900	11,790	5,560	2,960	2,720	2,490
6.....	2,840	2,900	2,700	2,100	1,700	1,700	1,900	11,430	5,380	2,940	2,630	2,470
7.....	2,980	2,900	2,700	2,100	1,700	1,700	2,000	11,200	5,220	2,920	2,840	2,450
8.....	3,100	2,900	2,700	2,000	1,700	1,700	2,500	10,970	5,100	2,870	3,060	2,440
9.....	3,180	2,900	2,690	2,000	1,700	1,700	3,000	10,710	4,980	2,860	3,020	2,410
10.....	3,230	2,900	2,690	1,950	1,700	1,700	4,000	10,410	4,820	2,860	2,980	2,400
11.....	3,280	2,900	2,690	1,950	1,650	1,700	6,000	10,060	4,700	2,770	2,870	2,390
12.....	3,300	2,900	2,690x	1,900	1,650	1,700	8,000	9,950	4,640	2,770	2,770	2,390
13.....	3,350	2,900	2,660	1,880	1,650	1,700	10,000	9,890	4,520	2,770	2,690	2,490
14.....	3,430	2,900	2,630	1,860x	1,640	1,700	12,000	9,800	4,430	2,720	2,630	2,760
15.....	3,540	2,900	2,600	1,860	1,640	1,710	13,000	9,680	4,430	2,700	2,600	3,040
16.....	3,620	2,800	2,600	1,850	1,640	1,720	14,000	9,510	4,480	2,690	2,540	3,220
17.....	3,670	2,800	2,600	1,850	1,630	1,730	15,000	9,400	4,500	2,650	2,490	3,400
18.....	3,690	2,800	2,600	1,850	1,630x	1,740	16,000	9,210	4,500	2,620	2,420	3,750
19.....	3,670	2,800	2,600	1,850	1,630	1,740	18,000	9,010	4,430	2,590	2,360	4,060
20.....	3,670	2,800	2,600	1,800	1,640	1,740	20,000	8,760	4,310	2,580	2,320	4,330
21.....	3,640	2,800	2,500	1,800	1,640	1,740x	19,000	8,490	4,220	2,550	2,300	4,540
22.....	3,350	2,800	2,500	1,800	1,640	1,740	19,000	8,240	4,090	2,500	2,300	4,690
23.....	3,500b	2,800	2,500	1,800	1,650	1,740	19,000	7,970	3,980	2,450	2,290	4,880
24.....	3,400	2,800	2,500	1,800	1,650	1,740	19,000	7,700	3,860	2,440	2,300	4,980
25.....	3,300	2,800	2,500	1,800	1,650	1,750	18,000	7,500	3,700	2,410	2,340	5,030
26.....	3,200	2,800	2,400	1,800	1,650	1,750	18,000b	7,270	3,580	2,420	2,380	5,010
27.....	3,100	2,800	2,400	1,750	1,700	1,750	17,000	7,120	3,500	2,470	2,400	4,940
28.....	3,100	2,800	2,400	1,750	1,700	1,750	16,000	6,980	3,400	2,490	2,390	4,910
29.....	3,000	2,800	2,400	1,750	-	1,750	15,510x	6,800	3,290	2,470	2,380	4,810
30.....	3,000	2,800	2,300	1,750	-	1,750	14,770	6,620	3,230	2,460	2,350	4,720
31.....	3,000	-	2,300	1,750	-	1,750	-	6,420	-	2,420	2,350	-
Mean	3,172	2,850	2,579	1,915	1,671	1,722	11,000	9,521	4,558	2,695	2,523	3,489
Per sq. mi.	0.34	0.30	0.27	0.20	0.18	0.18	1.17	1.02	0.49	0.29	0.27	0.37
Acre-feet	195,000	169,600	158,600	117,700	92,790	105,900	654,300	585,400	271,200	165,700	155,100	207,600

The Year..... Discharge: Daily - Maximum 20 April, 20,000e
 - Minimum 17 to 19 February, 1,630
 Mean 3,977; Per Square Mile 0.42
 Runoff: Acre-feet 2,879,000; Depth in inches on drainage area 5.75

b - Ice conditions 23 October to 26 April. x - Manual gauge readings.
 Daily discharges for period 23 October to 28 April determined principally from monthly discharge measurements and comparison with hydrographs of adjacent stations.

CLEARWATER RIVER BELOW WATERWAYS - STATION No. 7CD₂

Location: Lat. 56° 43' 10", long. 111° 20' 50", in NW. 1/4 sec. 15, tp. 89, rge. 9, W. 4th Mer., Alberta, at Northern Transportation Company dock about one and one-half miles below Waterways. Gauge: Staff. Period of Record: Elevations only, during open water 1950 to date. Extremes Recorded: Daily - Maximum, 28 April 1950, gauge height, 15.00 feet, Minimum, 20 to 23 October 1951, gauge height, 3.17 feet. Remarks: Records supplied by Northern Transportation Co. office, elevation 808.71 feet. Add 786.07 feet to all published gauge heights for years 1950 to 1953 to obtain elevations for those years. All elevations are based on Geodetic Survey of Canada bench mark V. 78 near Draper, elevation 819.47 feet (Bulletin No. 23, 1950).

Daily Elevations in Feet for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	-	793.60	792.09	790.47	789.80	789.53	790.27	-	-
2.....	-	-	-	-	793.37	791.99	791.83	789.51	789.70	790.22	-	-
3.....	-	-	-	-	793.34	792.07	793.75	789.69	789.64	790.20	-	-
4.....	-	-	-	-	793.15	792.26	793.20	789.79	789.60	790.18	-	-
5.....	-	-	-	-	793.09	792.25	792.75	790.01	789.51	790.12	-	-
6.....	-	-	-	-	793.04	792.00	792.57	790.02	789.50	790.22	-	-
7.....	-	-	-	-	793.00	791.90	792.15	790.14	789.47	790.24	-	-
8.....	-	-	-	-	792.98	791.76	791.75	790.20	789.50	790.24	-	-
9.....	-	-	-	-	792.98	791.68	791.47	790.14	789.57	790.23	-	-
10.....	-	-	-	-	792.85	791.58	791.28	790.05	789.49	790.17	-	-
11.....	-	-	-	-	792.85	791.50	791.08	789.90	789.39	790.15	-	-
12.....	-	-	-	-	792.85	791.48	790.80	789.78	789.37	-	-	-
13.....	-	-	-	-	792.90	791.46	-	789.71	789.34	-	-	-
14.....	-	-	-	-	792.85	791.39	-	789.78	789.50	-	-	-
15.....	-	-	-	-	792.80	791.36	-	789.78	789.64	-	-	-
16.....	-	-	-	-	792.78	791.30	-	789.70	789.78	790.10	-	-
17.....	-	-	-	-	792.80	791.25	-	789.65	789.85	-	-	-
18.....	-	-	-	-	792.68	791.14	-	789.55	790.09	-	-	-
19.....	-	-	-	-	792.48	790.96	-	789.54	790.25	-	-	-
20.....	-	-	-	-	792.33	790.83	-	789.58	790.20	-	-	-
21.....	-	-	-	-	792.21	790.89	-	789.50	790.40	-	-	-
22.....	-	-	-	-	792.14	790.79	-	789.50	790.44	-	-	-
23.....	-	-	-	-	792.07	790.75	-	789.55	790.44	-	-	-
24.....	-	-	-	-	791.84	790.69	-	789.55	790.44	-	-	-
25.....	-	-	-	-	791.83	790.68	-	789.55	790.47	-	-	-
26.....	-	-	-	-	791.80	790.58	-	789.59	790.49	-	-	-
27.....	-	-	-	-	791.93	790.49	790.05	789.55	790.42	-	-	-
28.....	-	-	-	794.30	792.14	790.38	790.06	789.50	790.44	-	-	-
29.....	-	-	-	794.15	792.23	790.39	790.06	789.54	790.38	-	-	-
30.....	-	-	-	793.90	792.17	790.45	789.88	789.50	790.33	-	-	-
31.....	-	-	-	-	792.16	-	789.85	789.51	-	-	-	-

LESSER SLAVE LAKE AT FAUST - STATION No. 7BJ₂

Location: Lat. 55° 19' 15", long. 115° 37' 25", in SE, 1/4 sec. 16, tp. 73, rge. 11, W. 5th Mer., Alberta, on dock in Giroux Bay on south side of lake. Gauge: Staff. Period of Record: Part-year records 1923 to 1931, 1933 to 1949 and 1951 to date. Extremes Recorded: Daily - Maximum, 12 October 1935, 1,897.07 feet, Minimum, 1 May 1941, 1,888.10 feet. Remarks: Elevations are referred to standard iron bench mark 75 feet east of buildings at shoreward end of dock, elevation 1,897.77 feet by Calgary Power Ltd. Published records prior to 1952 were based on an assumed datum; to convert to present datum add 1,797.03 feet.

Daily Elevations in Feet for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	-	-	-	-	-	-	-	-	-
2.....	-	-	-	-	-	-	-	1,893.35	-	-	-	-
3.....	-	-	-	-	1,894.00	-	-	-	-	-	-	-
4.....	-	-	-	-	-	-	-	-	-	1,892.11	-	-
5.....	-	-	-	-	-	-	1,894.04	-	1,892.61	-	-	-
6.....	-	-	-	-	-	-	-	-	-	-	-	-
7.....	-	-	-	-	-	1,894.14	-	-	-	-	-	-
8.....	-	-	-	-	-	-	-	-	-	-	-	-
9.....	-	-	-	-	-	-	-	1,893.16	-	-	-	-
10.....	-	-	-	-	1,894.07	-	-	-	-	-	-	-
11.....	-	-	-	-	-	1,894.28	-	-	-	1,892.08	-	-
12.....	-	-	-	-	-	-	1,893.64	-	-	-	-	-
13.....	-	-	-	-	-	-	-	-	1,892.50	-	-	-
14.....	-	-	-	-	-	1,894.17	-	-	-	-	-	-
15.....	-	-	-	-	-	-	-	-	-	-	-	-
16.....	-	-	-	-	-	-	-	1,892.91	-	-	-	-
17.....	-	-	-	-	1,894.09	-	-	-	-	-	-	-
18.....	-	-	-	-	-	-	-	-	-	1,891.95	-	-
19.....	-	-	-	-	-	-	1,893.65	-	1,892.43	-	-	-
20.....	-	-	-	-	-	-	-	-	-	-	-	-
21.....	-	-	-	-	-	-	-	1,892.93	-	-	-	-
22.....	-	-	-	-	-	1,894.25	-	-	-	-	-	-
23.....	-	-	-	-	-	-	-	1,892.89	-	-	-	-
24.....	-	-	-	-	1,894.33	-	-	-	-	-	-	-
25.....	-	-	-	-	-	-	-	-	-	1,891.99	-	-
26.....	-	-	-	-	-	-	1,893.59	-	-	-	-	-
27.....	-	-	-	-	-	-	-	-	1,892.21	-	-	-
28.....	-	-	-	-	-	1,894.26	-	-	-	-	-	-
29.....	-	-	-	-	-	-	-	-	-	1,891.88	-	-
30.....	-	-	-	-	-	-	-	1,892.65	-	-	-	-
31.....	-	-	-	-	1,894.14	-	-	-	-	-	-	-

Location: Lat. 54° 46' 30", long. 111° 58' 30", in NE. 1/4 sec. 6, tp. 67, rge. 13, W. 4th Mer., Alberta, at wharf in Town of Lac La Biche. **Gauge:** Staff. **Period of Record:** Open-water periods 1933 to date and a few readings in 1930 and 1931. **Extremes Recorded:** Daily - Maximum, 26 August 1956, 100.38 feet, Minimum, 12 September 1938, 94.59 feet. **Remarks:** Gauge heights are referred to a standard iron bench mark, three hundred feet west of shoreward end of wharf, gauge height 105.62 feet. Daily gauge heights for years 1948 to 1955 are included in this paper.

Daily Gauge Heights in Feet for Calendar Years 1948 and 1949

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1948												
1.....	-	-	-	-	96.16	-	-	-	-	-	-	-
2.....	-	-	-	-	-	-	-	-	-	-	-	-
3.....	-	-	-	-	-	-	98.06	-	-	-	-	-
4.....	-	-	-	-	-	-	-	97.81	97.76	-	-	-
5.....	-	-	-	-	-	98.26	-	-	-	-	-	-
6.....	-	-	-	-	-	-	-	-	-	-	-	-
7.....	-	-	-	-	-	-	-	97.81	-	-	-	-
8.....	-	-	-	-	96.36	-	-	-	-	-	-	-
9.....	-	-	-	-	-	-	-	-	-	-	-	-
10.....	-	-	-	-	-	-	98.01	-	-	-	-	-
11.....	-	-	-	-	-	-	-	-	97.71	-	-	-
12.....	-	-	-	-	-	98.06	-	-	-	-	-	-
13.....	-	-	-	-	-	-	-	-	-	-	-	-
14.....	-	-	-	-	-	-	-	97.76	-	-	-	-
15.....	-	-	-	-	97.66	-	-	-	-	-	-	-
16.....	-	-	-	-	-	-	-	-	-	-	-	-
17.....	-	-	-	-	-	-	98.01	-	-	-	-	-
18.....	-	-	-	-	-	-	-	-	-	-	-	-
19.....	-	-	-	-	-	98.06	-	-	-	-	-	-
20.....	-	-	-	-	-	-	-	-	-	-	-	-
21.....	-	-	-	-	-	-	-	97.76	-	-	-	-
22.....	-	-	-	-	98.06	-	-	-	-	-	-	-
23.....	-	-	-	-	-	-	-	-	-	-	-	-
24.....	-	-	-	-	-	-	97.96	-	-	-	-	-
25.....	-	-	-	-	-	-	-	-	-	-	-	-
26.....	-	-	-	-	-	98.06	-	-	-	-	-	-
27.....	-	-	-	-	-	-	-	-	-	-	-	-
28.....	-	-	-	-	-	-	-	97.76	-	-	-	-
29.....	-	-	-	-	98.36	-	-	-	-	-	-	-
30.....	-	-	-	-	-	-	-	-	-	-	-	-
31.....	-	-	-	-	-	-	97.86	-	-	-	-	-
1949												
1.....	-	-	-	-	-	95.98	-	-	-	-	-	-
2.....	-	-	-	-	-	-	-	-	-	-	-	-
3.....	-	-	-	-	-	-	-	-	-	-	-	-
4.....	-	-	-	-	96.28	-	-	95.88	-	-	-	-
5.....	-	-	-	-	-	-	-	-	-	95.68	-	-
6.....	-	-	-	-	-	-	96.03	-	-	-	-	-
7.....	-	-	-	-	-	-	-	-	95.78	-	-	-
8.....	-	-	-	-	-	95.98	-	-	-	-	-	-
9.....	-	-	-	-	-	-	-	-	-	-	-	-
10.....	-	-	-	-	-	-	-	95.93	-	-	-	-
11.....	-	-	-	-	96.23	-	-	-	-	95.68	-	-
12.....	-	-	-	-	-	-	-	-	-	-	-	-
13.....	-	-	-	-	-	-	96.03	-	-	-	-	-
14.....	-	-	-	-	-	-	-	-	95.78	-	-	-
15.....	-	-	-	-	-	95.98	-	-	-	-	-	-
16.....	-	-	-	-	-	-	-	-	-	-	-	-
17.....	-	-	-	-	-	-	-	95.88	-	-	-	-
18.....	-	-	-	-	-	-	-	-	-	95.68	-	-
19.....	-	-	-	-	96.13	-	-	-	-	-	-	-
20.....	-	-	-	-	-	-	95.98	-	-	-	-	-
21.....	-	-	-	-	-	-	-	-	95.68	-	-	-
22.....	-	-	-	-	-	95.98	-	-	-	-	-	-
23.....	-	-	-	-	-	-	-	95.83	-	-	-	-
24.....	-	-	-	-	-	-	-	-	-	-	-	-
25.....	-	-	-	-	-	-	-	-	-	-	-	-
26.....	-	-	-	-	96.03	-	-	-	-	-	-	-
27.....	-	-	-	-	-	-	95.98	-	-	95.63	-	-
28.....	-	-	-	-	-	-	-	-	95.68	-	-	-
29.....	-	-	-	-	-	-	-	-	-	-	-	-
30.....	-	-	-	-	-	95.98	-	-	-	-	-	-
31.....	-	-	-	-	-	-	-	95.83	-	-	-	-

Daily Gauge Heights in Feet for Calendar Years 1950 and 1951

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1950												
1.....	-	-	-	-	-	-	-	-	-	-	-	-
2.....	-	-	-	-	-	-	-	95.63	95.63	-	-	-
3.....	-	-	-	-	-	95.58	-	-	-	-	-	-
4.....	-	-	-	-	-	-	-	95.68	-	-	-	-
5.....	-	-	-	-	-	-	-	-	-	-	-	-
6.....	-	-	-	-	95.63	-	-	-	-	-	-	-
7.....	-	-	-	-	-	-	95.58	-	-	95.53	-	-
8.....	-	-	-	-	-	-	-	-	-	-	-	-
9.....	-	-	-	-	-	-	-	-	95.58	-	-	-
10.....	-	-	-	-	-	95.53	-	-	-	-	-	-
11.....	-	-	-	-	-	-	-	95.73	-	-	-	-
12.....	-	-	-	-	-	-	-	-	-	-	-	-
13.....	-	-	-	-	95.63	-	-	-	-	-	-	-
14.....	-	-	-	-	-	-	-	-	-	95.53	-	-
15.....	-	-	-	-	-	-	95.63	-	-	-	-	-
16.....	-	-	-	-	-	-	-	95.58	-	-	-	-
17.....	-	-	-	-	-	95.53	-	-	-	-	-	-
18.....	-	-	-	-	-	-	-	95.73	-	-	-	-
19.....	-	-	-	-	95.63	-	-	-	-	-	-	-
20.....	-	-	-	-	-	-	-	-	-	-	-	-
21.....	-	-	-	-	-	-	95.63	-	-	95.48	-	-
22.....	-	-	-	-	-	-	-	-	-	-	-	-
23.....	-	-	-	-	-	-	-	-	95.53	-	-	-
24.....	-	-	-	-	-	95.63	-	-	-	-	-	-
25.....	-	-	-	-	-	-	-	-	-	-	-	-
26.....	-	-	-	-	-	-	-	95.68	-	-	-	-
27.....	-	-	-	-	95.63	-	-	-	-	-	-	-
28.....	-	-	-	-	-	-	-	-	-	95.48	-	-
29.....	-	-	-	-	-	-	95.68	-	-	-	-	-
30.....	-	-	-	-	-	95.58	-	-	95.53	-	-	-
31.....	-	-	-	-	-	-	-	-	-	-	-	-
1951												
1.....	-	-	-	-	-	-	-	97.84	-	-	-	-
2.....	-	-	-	-	-	-	-	-	-	-	-	-
3.....	-	-	-	-	-	-	-	97.85	-	-	-	-
4.....	-	-	-	-	-	-	-	-	-	-	-	-
5.....	-	-	-	-	-	-	-	-	-	97.95	-	-
6.....	-	-	-	-	-	-	97.35	-	-	-	-	-
7.....	-	-	-	-	96.45	97.40	-	-	98.00	-	-	-
8.....	-	-	-	-	-	-	-	-	-	-	-	-
9.....	-	-	-	-	-	-	-	-	-	-	-	-
10.....	-	-	-	-	-	-	-	97.90	-	-	-	-
11.....	-	-	-	-	-	-	-	-	-	-	-	-
12.....	-	-	-	-	-	-	-	-	-	97.90	-	-
13.....	-	-	-	-	-	-	97.35	-	-	-	-	-
14.....	-	-	-	-	96.95	-	-	-	97.95	-	-	-
15.....	-	-	-	-	-	97.40	-	-	-	-	-	-
16.....	-	-	-	-	-	-	-	-	-	-	-	-
17.....	-	-	-	-	-	-	-	97.95	-	-	-	-
18.....	-	-	-	-	-	-	-	-	-	-	-	-
19.....	-	-	-	-	-	-	-	-	-	97.90	-	-
20.....	-	-	-	-	-	-	97.40	-	-	-	-	-
21.....	-	-	-	-	-	-	-	-	97.95	-	-	-
22.....	-	-	-	-	97.15	97.40	-	-	-	-	-	-
23.....	-	-	-	-	-	-	-	-	-	-	-	-
24.....	-	-	-	-	-	-	-	97.95	-	-	-	-
25.....	-	-	-	-	-	-	-	-	-	-	-	-
26.....	-	-	-	-	-	-	-	-	-	97.90	-	-
27.....	-	-	-	-	-	-	-	-	-	-	-	-
28.....	-	-	-	-	-	-	97.60	-	97.95	-	-	-
29.....	-	-	-	-	-	97.35	-	-	-	-	-	-
30.....	-	-	-	-	-	-	-	-	-	-	-	-
31.....	-	-	-	-	97.30	-	-	98.00	-	97.85	-	-

Daily Gauge Heights in Feet for Calendar Years 1952 and 1953

[illegible]

Daily Gauge Heights in Feet for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	-	-	-	-	-	-	-	-	-
2.....	-	-	-	-	-	-	-	96.20	-	-	-	-
3.....	-	-	-	-	-	-	-	-	-	-	-	-
4.....	-	-	-	-	-	-	-	-	-	95.93	-	-
5.....	-	-	95.64	-	-	-	96.46	-	-	-	-	-
6.....	-	-	-	-	-	-	-	-	95.93	-	-	-
7.....	-	-	-	-	-	96.57	-	-	-	-	-	-
8.....	-	-	-	-	-	-	-	-	-	-	-	-
9.....	-	-	-	-	-	-	-	96.19	-	-	-	-
10.....	-	-	-	-	96.49	-	-	-	-	-	-	-
11.....	-	-	-	-	-	-	-	-	-	95.92	-	-
12.....	-	-	-	-	-	-	96.45	-	95.92	-	-	-
13.....	-	-	-	-	-	-	-	-	-	-	-	-
14.....	-	-	-	-	-	96.43	-	-	-	-	-	-
15.....	-	-	-	-	-	-	-	-	-	-	-	-
16.....	-	-	-	-	-	-	-	96.13	-	-	-	-
17.....	-	-	-	-	96.50	-	-	-	-	-	-	-
18.....	-	-	-	-	-	-	-	-	-	95.92	-	-
19.....	-	-	-	-	-	-	96.35	-	-	-	-	-
20.....	-	-	-	-	-	-	-	-	96.03	-	-	-
21.....	-	-	-	-	-	96.43	-	-	-	-	-	-
22.....	-	-	-	-	-	-	-	96.06	-	-	-	-
23.....	-	-	-	-	-	-	-	96.03	-	-	-	-
24.....	-	-	-	-	96.52	-	-	-	-	-	-	-
25.....	-	-	-	-	-	-	-	-	-	95.90	-	-
26.....	-	-	-	-	-	-	-	-	-	-	-	-
27.....	-	-	-	-	-	-	96.23	-	96.03	-	-	-
28.....	-	-	-	-	-	96.47	-	-	-	-	-	-
29.....	-	-	-	-	-	-	-	-	-	-	-	-
30.....	-	-	-	-	-	-	-	96.03	-	95.86	-	-
31.....	-	-	-	-	96.56	-	-	-	-	95.89	-	-

MISCELLANEOUS DISCHARGE MEASUREMENTS MADE IN ATHABASCA RIVER TRIBUTARY BASIN
FOR THE YEAR 1958

Date	Stream	Location	Discharge cfs
11 June	West Prairie River	Near High Prairie	89
13 June	"	"	79
13 June	East Prairie River	Near Enilda	152
16 June	"	"	122
16 June	West Prairie River	Near High Prairie	65
18 June	East Prairie River	Near Enilda	118
20 June	"	"	105
25 June	"	"	110
25 June	"	"	109
25 June	West Prairie River	Near High Prairie	42.3
29 Oct.	"	"	0.2

ATHABASCA LAKE TRIBUTARY BASIN

FOND-DU-LAC RIVER NEAR STONY RAPIDS - STATION No. 7LE₁

Location: Lat. 59° 16', long. 105° 48', Saskatchewan, near mouth at extreme east end of Lake Athabasca, below outlet of Stony Lake and about one mile east of the settlement of Stony Rapids. Drainage Area: 25,820 square miles. Gauge: Wire-weight. Measurement of Discharge: From cableway. Period of Record: September 1946 to date. Average Discharge: (12 years) - 9,739 cfs. Extremes Recorded: Daily - Maximum, 7 November 1947, 19,690 cfs, Minimum, 28 February 1957, 4,060 cfs. Revisions: 1951, W.R.P. 117; August 1953 mean discharge has been corrected to 7,585 cfs. Remarks: Records fair during open-water periods and poor during ice period.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	8,090e	8,150e	7,490	6,170	5,670	5,520	5,420	8,320e	16,990	14,720	12,070e	12,630
2.....	8,050	8,170	7,470	6,150	5,660	5,520	5,510	8,430	17,030e	14,640e	12,030e	12,760e
3.....	8,290e	8,130	7,450	6,120	5,610	5,500	5,610	8,600e	17,060e	14,570	12,000	12,880
4.....	8,530	8,110e	7,420	6,100	5,570	5,480	5,700	8,770	17,100	14,620e	12,060e	12,960e
5.....	8,500e	8,090	7,380	6,080	5,520	5,480	5,730	8,940e	17,230e	14,660	12,130e	13,030
6.....	8,470e	8,060e	7,340	5,990	5,480	5,480	5,760b	9,110	17,370e	14,490e	12,190	13,060e
7.....	8,450	8,020	7,310	5,900	5,450	5,480	5,750e	9,230e	17,500	14,300e	12,320e	13,090e
8.....	8,250e	8,020e	7,270	5,880	5,440	5,500	5,740	9,350e	17,600	14,120	12,440	13,120
9.....	8,050	8,020e	7,180	5,860	5,420	5,520	5,750e	9,470	17,570e	14,220e	12,440e	13,160e
10.....	8,150e	8,020	7,090	5,840	5,390	5,450	5,770e	9,620e	17,530e	14,320	12,440e	13,200e
11.....	8,250	8,020e	7,060	5,820	5,370	5,380	5,780	9,780	17,500	14,470e	12,440	13,230e
12.....	8,250e	8,020	7,020	5,800	5,340	5,320	5,990e	9,930e	17,400e	14,620	12,370e	13,270
13.....	8,250e	8,000e	6,980	5,780	5,360	5,270	6,200	10,090e	17,300	14,470e	12,310e	13,300e
14.....	8,250	7,980	6,940	5,770	5,380	5,210	6,390e	10,240	17,200	14,320e	12,240	13,320
15.....	8,230e	7,860e	6,910	5,760	5,400	5,220	6,580	10,660e	17,500	14,170	12,290e	13,400e
16.....	8,210	7,850e	6,850	5,760	5,420	5,240	6,660e	11,080e	17,470e	13,840e	12,340e	13,470
17.....	8,210e	7,830	6,790	5,760	5,440	5,330	6,740e	11,510	17,430e	13,520	12,390	13,640e
18.....	8,210	7,790e	6,730	5,740	5,450	5,420	6,820	12,980	17,400	13,370e	12,390e	13,820
19.....	8,180e	7,750	6,660	5,730	5,450	5,520	6,920e	13,120e	17,390e	13,230e	12,390	13,970e
20.....	8,160e	7,730e	6,590	5,710	5,450	5,620	7,010	13,270	17,380e	13,080	12,540	14,120
21.....	8,130	7,720e	6,540	5,680	5,500	5,700	7,090e	13,390e	17,360e	13,050e	12,630	14,140e
22.....	8,130e	7,700e	6,480	5,660	5,560	5,790	7,170	13,500e	17,350	13,010e	12,530e	14,170
23.....	8,130	7,680	6,440	5,640	5,450	5,870	7,380e	13,620	16,770e	12,980	12,440e	14,200e
24.....	8,110e	7,830b	6,410	5,620	5,460	5,820	7,600e	14,000e	16,200e	12,760e	12,340	14,240e
25.....	8,090e	7,790	6,370	5,640	5,480	5,760	7,810	14,370	15,620	12,540	12,260e	14,270
26.....	8,070e	7,750	6,340	5,660	5,500	5,690	7,890e	14,570e	15,170e	12,460e	12,190	14,270e
27.....	8,050	7,710	6,300	5,660	5,520	5,620	7,970	14,770	14,720	12,390	12,240e	14,270
28.....	8,130e	7,640	6,260	5,660	5,520	5,520	8,040e	15,090e	14,720e	12,340e	12,290	14,320e
29.....	8,210	7,560	6,230	5,680	-	5,410	8,100	15,400e	14,720e	12,290	12,340	14,370e
30.....	8,170e	7,520	6,210	5,700	-	5,310	8,210e	15,720	14,720e	12,200e	12,420e	14,420
31.....	8,130	-	6,190	5,690	-	5,360	-	16,360e	-	12,100	12,490	-
Mean	8,206e	7,884e	6,829	5,807	5,474	5,494	6,636e	11,720e	16,810e	13,610e	12,320e	13,600e
Per sq. mi.	0.32	0.31	0.26	0.22	0.21	0.21	0.26	0.45	0.65	0.53	0.48	0.53
Acre-feet in 1,000	504.6	469.1	419.9	357	304	337.8	394.9	720.6	1,000	836.8	757.7	809.5

The Year.....Discharge: Daily - Maximum 8 June, 17,600

- Minimum 14 March, 5,210

Mean 9,547; Per Square Mile 0.37

Runoff: Acre-feet 6,912,000; Depth in inches on drainage area 5.02

b - Ice conditions 24 November to 6 April.

e - Estimated.

Location: Lat. 59° 22' 55", long. 108° 52' 50", Saskatchewan, at main Gunnar Mines wharf, on north shore of St. Mary's Channel, about sixteen miles southwest of Uranium City, and four miles east of Crackingstone Point. Gauge: Staff. Period of Record: Periods of varying length 1956 to date. Extremes Recorded: Daily - Maximum, 20 June 1958, 691.59 feet, Minimum, 1 March 1957, 684.73 feet. Remarks: Bench mark to which elevations are referred is fifty-four feet north of pumphouse and is top of nipple on steel pin set in granite bedrock (Gunnar Mines Station "U") elevation 707.82 feet.

Daily Elevations in Feet for Water Year 1958

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	688.43	687.05	-	-	-	-	-	687.59	-	-	-	-
2.....	688.28	-	-	-	-	685.21	687.87	690.28	691.18	-	-	688.60
3.....	688.27	-	-	-	-	-	687.94	690.34	691.17	-	-	-
4.....	687.95	686.96	-	-	-	-	-	690.56	691.11	690.04	688.46	-
5.....	687.51	-	-	-	-	-	-	690.65	691.11	690.02	-	-
6.....	-	686.79	-	-	-	-	-	-	-	690.07	688.42	-
7.....	688.12	686.78	-	-	-	-	688.16	690.94	-	690.04	-	-
8.....	688.09	686.74	-	-	-	-	688.21	-	691.11	690.04	688.30	-
9.....	688.03	686.72	-	-	-	-	685.32	688.25	691.04	691.13	690.01	-
10.....	688.00	-	-	-	-	-	688.34	691.18	691.13	-	-	-
11.....	687.97	-	-	-	-	-	-	691.25	691.12	689.84	688.26	-
12.....	687.85	686.68	-	-	-	685.28	-	688.40	691.07	689.83	688.12	-
13.....	-	686.67	-	-	-	-	-	688.58	691.36	-	689.64	-
14.....	687.30	686.66	-	-	-	-	-	688.65	691.39	691.11	-	-
15.....	687.27	686.64	-	-	-	-	-	688.74	-	691.09	689.61	687.95
16.....	-	686.61	-	-	-	-	685.42	688.83	691.51	691.03	689.57	-
17.....	-	-	-	-	-	-	-	688.99	-	691.07	-	-
18.....	-	-	-	-	-	-	-	-	691.54	-	-	-
19.....	-	686.61	-	-	-	685.27	-	691.56	690.91	689.32	687.71	-
20.....	-	686.61	-	-	-	-	-	689.10	691.59	-	689.30	687.70
21.....	-	686.58	-	-	685.38	-	-	689.21	-	690.82	689.09	-
22.....	-	686.55	-	-	-	-	-	689.30	-	689.19	687.60	-
23.....	-	686.53	-	-	-	-	686.00	689.34	691.49	690.83	-	687.59
24.....	-	-	-	-	-	-	686.14	689.38	691.54	690.73	-	687.51
25.....	-	686.38	-	-	-	-	-	691.50	690.63	-	-	-
26.....	-	686.52	-	-	-	685.24	-	689.53	691.46	690.60	689.02	-
27.....	-	686.51	-	-	-	-	-	689.60	-	-	-	687.45
28.....	687.11	-	-	-	-	-	686.94	689.61	691.38	690.53	688.91	-
29.....	687.23	-	-	-	-	-	687.16	689.77	-	690.43	-	687.31
30.....	687.08	-	-	-	-	-	687.41	689.81	-	690.41	688.82	-
31.....	687.07	-	-	-	-	-	-	689.94	-	690.37	-	-

MISCELLANEOUS DISCHARGE MEASUREMENTS MADE IN ATHABASCA LAKE TRIBUTARY BASIN
FOR THE YEAR 1958

Date	Stream	Location	Discharge cfs
23 Feb.	Fond-du-Lac River	At Redwillow Rapids	Nil b
21 Aug.	"	"	300 to 400 e
26 Sept.	Tazin Lake Diversion Canal	Above Hardin Lake	136
26 Sept.	"	"	444
27 Sept.	"	"	713
27 Sept.	"	"	966
28 Sept.	"	"	1,120
29 Sept.	"	"	1,180

b - Ice conditions.

e - Estimated.

PEACE RIVER AT HUDSON HOPE - STATION No. 7EF₁

Location: Lat. 56° 01' 39", long. 121° 53' 56", British Columbia at ferry crossing, fourteen miles below Peace River Canyon. Drainage Area: 27,800 square miles. Gauge: Chain. Measurement of Discharge: From boat. Period of Record: Miscellaneous measurements in 1948 and 1949; part-year records 1917 to 1922; and mainly continuous October 1949 to date. Average Discharge: (7 years) - 34,300 cfs. Extremes Recorded: Daily - Maximum, 5 June 1922, 267,000 cfs, Minimum, 28 November to 2 December 1952, 3,480 cfs. Revisions: October 1949 to September 1954, W.R.P. 121. Remarks: Records good; fair during ice period.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	25,100	30,700	15,000	10,800	8,700	7,250	9,100	39,300	218,000	64,400	21,700	16,500
2.....	25,400e	28,200e	14,600	10,900	8,600	7,300	9,400	40,600	195,000	63,300	21,700	16,900
3.....	25,700e	26,000e	14,200	11,000	8,500	7,400	9,800	45,600	179,000	59,800	21,500	17,300
4.....	26,000	24,300	13,800	11,000	8,450	7,550	10,300	50,700	167,000	56,400	21,300	17,800
5.....	25,200e	21,900e	13,700	11,000	8,300	7,650	10,700	55,600	159,000	54,600	21,100	17,500
6.....	24,500	20,000e	13,400	11,000	8,200	7,800	11,400	62,200	156,000	52,700	20,700	17,300
7.....	24,700e	18,200e	13,200	11,000	8,050	8,050	12,200	63,900	157,000	50,800	20,500	16,900
8.....	24,900e	16,700	13,100	11,000	7,800	8,200	13,000	67,700	156,000	49,700	20,500	16,600
9.....	25,200e	15,900e	13,000	11,300	7,700	8,250	13,600	72,700	155,000	48,900	20,700	16,400
10.....	25,400e	15,600e	13,400	11,800	7,500	8,200	14,700	73,600	153,000	47,300	20,900	16,200
11.....	25,600	15,500	14,100	12,800	7,300	8,100	16,700	74,400	144,000	47,500	20,700	16,000
12.....	23,500e	16,500e	14,900	13,300	7,200	8,000	19,200	72,700	132,000	44,700	20,300	15,800
13.....	22,100e	17,800e	15,000	13,400	7,100	7,850	22,500	70,500	122,000	42,800	20,000	15,800
14.....	20,700	19,300e	15,000	13,300	7,050	7,750	25,500	65,000	113,000	42,400	19,600	15,700
15.....	19,800e	20,700	14,800	12,900	7,000	7,700	29,000	63,700	110,000	40,200	19,300	15,700
16.....	19,400e	21,200e	14,500	12,500	6,950	7,620	29,000	69,400	103,000	37,000	19,100	15,800
17.....	19,000e	21,100e	13,900	12,200	6,900	7,550	28,200	72,100	96,000	34,800e	18,900	15,900
18.....	18,700	21,000	13,500	11,700	6,850	7,550	27,300	72,700	86,000	32,600	18,600	16,100
19.....	17,900e	19,700e	12,800	11,500	6,820	7,600	26,500	73,800	82,800	32,900	18,300	18,700
20.....	17,300e	18,300e	12,300	11,300	6,820	7,700	25,900	81,600	78,500	31,600	17,600	20,800
21.....	16,700	17,200e	11,700	11,000	6,850	7,800	25,000	93,500	73,300	29,900	17,400	22,700
22.....	16,000e	16,500	11,000	10,800	6,900	8,000	24,000	123,000	68,300	29,000	17,100	25,600
23.....	15,300e	16,300e	10,500	10,600	6,950	8,050	23,700	152,000	63,900	28,500	16,900	28,500
24.....	14,500e	16,100	9,900	10,400	6,980	8,150	23,700	169,000	60,800	27,700	16,800	27,400
25.....	13,800	15,800b	9,700	10,000	7,000	8,200	23,300	194,000	60,100	27,000	16,900	26,100
26.....	14,200e	15,700	9,450	9,720	7,050	8,300	23,200	209,000	55,900	26,700	16,900	24,600
27.....	14,700e	15,800	9,250	9,580	7,100	8,400	23,900	213,000	54,300	25,700	16,800	23,400
28.....	15,200e	15,800	9,300	9,380	7,200	8,500	25,000	214,000	54,500	24,400	16,700	22,800
29.....	16,100	15,600	9,500	9,220	-	8,550	28,500e	216,000	55,100	23,400	16,600	29,500
30.....	20,700e	15,400	9,900	9,000	-	8,600	33,200	222,000	60,900	23,100	16,500	36,900
31.....	24,500e	-	10,300	8,800	-	8,700	-	223,000	-	22,200	16,500	-
Mean	20,600e	19,000e	12,500	11,100	7,420	7,950	20,600	107,000	112,000	39,400	19,000	20,100
Per sq. mi.	0.74	0.68	0.45	0.40	0.27	0.29	0.74	3.85	4.03	1.42	0.68	0.72
Acre-feet in 1,000	1,265	1,128	771	682.7	412.2	488.6	1,225	6,578	6,683	2,424	1,166	1,196

The Year..... Discharge: Daily - Maximum 31 May, 223,000

- Minimum 19 and 20 February, 6,820

Mean 33,200; Per Square Mile 1.19

Runoff: Acre-feet 24,020,000; Depth in inches on drainage area 16.19

e - Estimated.

b - Ice conditions 25 November to 29 April.

Location: Lat. 56° 08' 09", long. 120° 40' 13", British Columbia, on Alaska Highway bridge, two miles south of Taylor.
 Drainage Area: 38,300 square miles. Gauge: Wire-weight. Measurement of Discharge: Made from bridge. Period of Record: Miscellaneous measurements in 1951; periods of varying length July 1944 to September 1950 and October 1951 to date. Average Discharge: (6 years) - 46,400 cfs. Extremes Recorded: Daily - Maximum, 31 May 1948, 407,000 cfs, Minimum, 3 to 6 December 1952, 4,400 cfs. Remarks: Records fair.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	33,900e	53,100	20,100	14,000	10,400	8,250	11,500	45,800	264,000	86,200	28,300e	21,000
2.....	34,600e	57,700	19,600	13,900	10,300	8,500	12,000	53,300	242,000	81,700	28,100	21,200
3.....	35,200	52,200	19,000	13,900	10,200	8,650	12,800	64,700	225,000	74,700	27,700	23,700
4.....	35,900e	46,300	18,500	14,000	10,100	8,800	13,800	72,400	212,000	70,400	27,200	23,800
5.....	36,600	43,100	18,200	14,000	9,900	9,000	14,500	83,600	202,000	67,900	26,400	24,400
6.....	35,200	40,600	18,100	14,000	9,550	9,200	16,300	90,200	201,000	65,300	26,100	23,700
7.....	33,600	30,400	18,100	14,000	9,150	9,400	17,600	95,100	205,000	62,000	25,700	22,300
8.....	31,900	28,000	18,200	14,100	8,800	9,500	20,000	103,000	206,000	59,300	26,100	22,000
9.....	30,800	26,800	18,800	14,500	8,550	9,700	22,500	112,000	207,000	58,000	26,800	20,900
10.....	30,100	26,200	19,200	15,500	8,150	9,500	25,000	115,000	203,000	57,800	28,000	20,400
11.....	29,800	25,600	19,800	15,800	8,000	9,400	28,000	112,000	190,000	57,400	27,900	20,200
12.....	29,100	25,200	20,000	15,900	7,850	9,150	34,000	104,000	172,000	54,600	27,100	20,600
13.....	29,300	25,600	20,200	16,000	7,800	8,800	40,000	92,000	157,000	52,000	26,200	20,400
14.....	30,200e	26,500	20,100	16,000	7,800	8,600	45,000	86,700	150,000	51,600	25,400	20,300
15.....	31,100	26,600	20,000	15,800	7,800	8,600	47,800	86,000	146,000	49,200	25,400	20,500
16.....	30,000	25,900	19,400	15,400	7,800	8,800	48,100	100,000	139,000	46,300	25,100	20,600
17.....	29,600	25,300	18,800	15,200	7,800	9,100	46,400	110,000	130,000	44,000	24,900	21,000
18.....	29,000	25,900	18,000	14,800	7,700	9,300	43,000	109,000	121,000	42,200	24,500	21,400
19.....	28,100	25,100	17,500	14,500	7,700	9,600	37,300	108,000	116,000	40,500	24,600	22,800
20.....	27,400	24,000	16,800	14,100	7,700	9,900	35,600	115,000	110,000	39,500	24,600	25,400
21.....	26,500	21,500	15,800	13,700	7,750	10,100	34,400	147,000	103,000	38,100	24,200	29,200
22.....	26,100	20,200	15,000	13,300	7,800	10,200	32,900	156,000	96,300	36,600	22,800	34,800
23.....	24,400	19,500b	14,200	12,800	7,800	10,400	31,900	213,000	90,000	36,000	22,700	36,000
24.....	20,700	19,200	13,400	12,500	7,850	10,500	31,000	235,000	86,300	34,800	22,600	33,800
25.....	19,400	19,100	12,500	12,200	7,850	10,500	30,000	254,000e	81,700	33,800	22,400	32,700
26.....	22,300	19,500	11,900	11,800	7,900	10,500	29,900	272,000	78,300	31,900	22,200	30,100
27.....	22,700	19,900	11,700	11,500	8,000	10,600	30,000	269,000	77,200	30,400	22,000	29,900
28.....	24,700	20,100	11,800	11,200	8,100	10,700	31,500b	267,000	79,600	30,800	21,800	30,100
29.....	33,200	20,300	12,200	10,900	-	10,800	32,700	275,000	96,300	30,100	21,700	36,900
30.....	36,100	20,200	13,000	10,700	-	10,900	40,000	281,000	95,100	29,300	21,400	48,400
31.....	46,000	-	13,800	10,500	-	11,200	-	278,000	-	28,500	20,900	-
Mean	30,100	28,700	16,900	13,800	8,430	9,620	29,800	145,000	149,000	49,100	24,900	26,000
Per sq.mi.	0.79	0.75	0.44	0.36	0.22	0.25	0.78	3.79	3.89	1.28	0.65	0.68
Acre-feet in 1,000	1,852	1,705	1,039	845.9	468.3	591.4	1,776	8,935	8,890	3,017	1,529	1,544

The Year..... Discharge: Daily - Maximum 30 May, 281,000
 - Minimum 18 to 20 February, 7,700
 Mean 44,500; Per Square Mile 1.16
 Runoff: Acre-feet 32,190,000; Depth in inches on drainage area 15.77

e - Estimated.

b - Ice conditions 23 November to 28 April.

PEACE RIVER AT PEACE RIVER - STATION No. 7HA₁

Location: Lat. 56° 15', long. 117° 17', in NE. 1/4 sec. 31, tp. 83, rge. 21, W. 5th Mer., Alberta, at combined traffic and railway bridge. Drainage Area: 72,000 square miles. Gauge: Wire-weight. Measurement of Discharge: From bridge. Period of Record: May 1915 to November 1932 and November 1957 to date. Average Discharge: (16 years) - 57,740 cfs. Extremes Recorded: Daily - Maximum, 31 May 1958, 397,100 cfs, Minimum, 28 and 29 March 1919, 6,350 cfs. Remarks: Records good during open-water periods and poor during ice period.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	-	-	21,240	16,890	11,740	9,680	14,990	77,500	386,800	159,000	36,220	24,910
2.....	-	-	22,420	15,990	11,790	9,860	15,730	92,720	385,400	136,800	35,620	24,390
3.....	-	-	21,170	15,790	11,440	10,040	16,760	102,700	319,700	138,100	34,700	25,080
4.....	-	-	21,870	16,500	11,390	10,300	19,890	111,100	269,300	120,800	33,550	27,050
5.....	-	-	22,420	18,520	11,050	10,220	15,230	120,400	248,300	109,200	32,990	30,380
6.....	-	-	26,500	18,450	10,630	10,170	24,730	136,000	234,600	102,500	32,100	27,610
7.....	-	-	24,140	17,090	10,580	10,720	46,470	137,100	230,300	100,200	31,340	27,230
8.....	-	-	25,000	16,500	9,940	11,240	58,840	152,100	229,200	93,070	30,590	26,140
9.....	-	-	22,500	19,380	9,370	11,340	82,030	157,500	227,400	91,480	30,380	24,910
10.....	-	-	24,140	19,750	9,070	11,150	104,700	162,000	228,400	87,450	30,070	23,890
11.....	-	-	21,480	18,660	8,780	10,860	128,400	170,500	227,400	84,120	29,660	22,900
12.....	-	-	29,860	17,490	8,650	10,300	151,600	159,500	205,800	82,550	30,910	22,660
13.....	-	-	31,230	17,620	8,740	10,080	203,500	145,300	191,500	83,600	30,910	24,560
14.....	-	-	31,670	17,290	8,820	9,990	173,200b	149,900	174,000	76,980	30,910	25,700
15.....	-	28,760b	31,340	16,440	8,820	9,640	174,200	154,500	159,500	75,600	30,170	24,390
16.....	-	26,680	30,170	17,150	8,820	10,630	148,500	160,800	156,200	73,520	29,250	24,560
17.....	-	26,320	29,250	17,690	8,780	10,220	135,400	159,200	149,900	68,870	28,950	23,970
18.....	-	24,310	27,700	16,960	8,820	10,490	125,000	149,400	141,200	65,090	28,460	24,220
19.....	-	23,470	27,050	16,500	8,900	10,860	110,600	142,100	132,900	61,510	28,170	24,560
20.....	-	23,970	24,560	15,540	8,820	10,950	102,000	139,200	128,200	55,250	28,370	25,700
21.....	-	23,470	21,170	15,860	8,820	11,440	98,380	142,800	120,900	49,770	28,270	28,080
22.....	-	24,140	18,100	15,610	8,900	11,340	95,380	170,000	117,700	47,750	28,170	29,860
23.....	-	23,800	17,220	15,990	8,900	11,390	93,600	158,800	111,500	47,460	27,980	36,340
24.....	-	22,580	17,830	15,230	9,030	11,340	89,550	261,500	105,600	48,180	27,700	39,130
25.....	-	25,080	16,630	14,510	9,290	11,240	82,550	269,600	103,200	46,900	26,780	41,690
26.....	-	24,910	16,180	13,480	9,330	11,340	77,150	315,900	98,560	43,560	26,140	37,540
27.....	-	23,970	14,750	13,260	9,420	11,290	73,350	335,500	97,850	40,910	25,610	35,280
28.....	-	26,680	13,930	13,760	9,500	11,890	70,410	318,900	108,600	39,510	25,260	33,550
29.....	-	27,050	16,500	12,830	-	12,300	67,660	325,200	117,900	38,390	25,870	31,880
30.....	-	2,7980	19,160	11,840	-	13,150	66,800	338,800	164,500	37,660	25,610	41,040
31.....	-	-	18,040	11,740	-	14,050	-	397,100	-	36,690	24,650	-
Mean	-	-	22,750	16,140	9,576	10,950	88,890	187,500	185,700	75,560	29,530	28,640
Per sq. mi.	-	-	0.32	0.22	0.13	0.15	1.23	2.60	2.58	1.05	0.41	0.40
Acre-feet in 1,000	-	-	1,399	992.4	531.8	673.4	5,289	11,530	11,050	4,646	1,816	1,704

The Period..... Discharge: Daily - Maximum 31 May, 397,100
(304 days) - Minimum 12 February, 8,650

Mean 65,730; Per Square Mile 0.91

Runoff: Acre-feet 39,630,000; Depth in inches on drainage area 10.32

b - Ice conditions 15 November to 14 April.

Gauge heights from graph of observed readings 30 May to 6 June.

Location: Lat. 56° 01' 55", long. 123° 54' 20", British Columbia, at Finlay Forks about five miles upstream from mouth. Drainage Area: 16,600 square miles. Gauge: Wire-weight. Measurement of Discharge: From boat. Period of Record: Miscellaneous measurements in 1944 and 1945; open water October 1945 to date. Extremes Recorded: Daily - Maximum, 30 May 1948, 211,000 cfs, (estimated), Minimum, 24 April 1946, 2,260 cfs. Revisions: October 1945 to September 1957, W.R.P. 125. Remarks: Records good; fair during high water. This station is affected by backwater from Parsnip River during varying high-water periods.

Daily Discharge in Cubic Feet per Second for Water Year 1945-46

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	7,020	7,100	-	-	-	-	-	4,100	77,000e	33,200	32,400	14,900
2.....	7,340	6,900e	-	-	-	-	-	3,990	79,000e	32,500	31,900	14,700
3.....	7,220	6,700e	-	-	-	-	-	4,020	84,500e	32,200	31,100	14,800
4.....	6,940	6,600e	-	-	-	-	-	5,360	96,400	31,600	29,400	14,700
5.....	6,780	6,500e	-	-	-	-	-	8,140	97,900	30,800	28,000	14,600
6.....	6,860	6,350e	-	-	-	-	-	11,900	90,900	29,000	26,800	14,100
7.....	7,180	6,280e	-	-	-	-	-	17,000	85,000	27,500	25,600	13,600
8.....	7,380	6,200	-	-	-	-	-	23,600	83,400	26,400	24,800	12,900
9.....	7,740	-	-	-	-	-	-	30,900	83,500	25,900	24,000	12,200
10.....	7,820	-	-	-	-	-	-	35,400	80,300	25,300	23,900	12,000
11.....	8,780	-	-	-	-	-	-	37,800	75,900	25,400	24,900	11,800
12.....	9,780	-	-	-	-	-	-	42,400	76,500	27,500	25,400	11,600
13.....	10,300	-	-	-	-	-	-	50,500	79,000	32,700	24,700	11,500
14.....	10,700	-	-	-	-	-	-	54,400	81,800	36,800	23,600	11,700
15.....	12,500	-	-	-	-	-	-	53,300	75,900	38,700	22,700	12,000
16.....	18,700	-	-	2,830b	-	-	-	54,500	70,900	39,000	22,400	12,100
17.....	22,700	-	-	-	-	-	-	60,100	69,500	45,700	22,300	11,800
18.....	22,300	-	-	-	-	-	-	63,200	67,400	49,000	20,800	11,500
19.....	20,800	-	-	-	-	-	-	61,500	64,800	45,600	20,000	11,100
20.....	19,200	-	-	-	-	-	-	62,000	61,300	40,700	19,200	10,900
21.....	17,800	-	-	-	-	-	-	67,800	56,600	37,700	18,600	11,700
22.....	16,400	-	-	-	-	-	-	76,600	51,800	39,000	18,000	13,100
23.....	15,100	-	-	-	-	-	-	82,500	48,400	40,500	18,100	13,700
24.....	14,000	-	-	-	-	-	2,260	86,300	45,900	38,700	18,300	14,000
25.....	13,700	-	-	-	-	-	2,900e	102,000e	42,900	36,400	18,600	14,500
26.....	13,000	-	-	-	-	-	3,680	114,000e	43,300	33,900	18,000	14,500
27.....	13,700	-	-	-	-	-	3,900e	122,000e	43,000	33,000	17,200	13,700
28.....	12,200e	-	-	-	-	-	4,020	128,000e	41,100	33,000	16,400	13,000
29.....	10,600e	-	-	-	-	-	4,130	126,000e	37,800	35,300	15,900	12,700
30.....	9,100	-	-	-	-	-	4,160	106,000e	35,000	34,700	15,500	13,400
31.....	7,300	-	-	-	-	-	-	86,000e	-	33,500	15,200	-
Mean	12,000	-	-	-	-	-	-	57,500	67,600	34,600	22,400	13,000
Per sq. mi.	0.72	-	-	-	-	-	-	3.46	4.07	2.08	1.35	0.78
Acre-feet in 1,000	735.7	-	-	-	-	-	-	3,533	4,020	2,125	1,376	771.2

The Period..... Discharge: Daily - Maximum 28 May, 128,000e
 (184 days) - Minimum 24 April, 2,260

Mean 34,400; Per Square Mile 2.07

Runoff: Acre-feet 12,560,000; Depth in inches on drainage area 14.19

e - Estimated.

b - Ice conditions.

Backwater effect from Parsnip River from 25 May to 3 June.

Daily Discharge in Cubic Feet per Second for Water Year 1946-47

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	13,700	6,090	-	-	-	-	-	18,500	128,000	39,000	30,800	17,000
2.....	13,700	6,170e	-	-	-	-	-	17,100	122,000	38,800	29,000	16,800
3.....	13,300	6,200e	-	-	-	-	-	16,200	117,000	37,900	28,200	17,800
4.....	12,700	5,920e	-	-	-	-	-	15,500	116,000	35,100	26,600	19,000
5.....	12,200	5,830e	-	-	-	-	-	14,800	120,000	33,700	24,800	19,000
6.....	11,800	6,120e	-	-	-	-	-	14,700	126,000	34,600	22,900	18,800
7.....	11,800	6,160	-	-	-	-	-	15,400	123,000	35,400	21,600	17,800
8.....	12,400	5,440e	-	-	-	-	-	18,400	118,000	35,000	20,500	17,000
9.....	13,500	4,720	-	-	-	-	-	23,500	114,000e	34,400	19,800	16,300
10.....	13,700	-	-	-	-	-	-	29,300	112,000	34,400	19,400	15,600
11.....	13,300	-	-	-	-	-	-	32,600	110,000	32,800	19,200	14,900
12.....	12,900	-	-	-	-	-	-	34,800	109,000	31,900	18,500	15,500
13.....	12,800	-	-	-	-	-	-	37,400	106,000	33,300	18,100	17,200
14.....	12,400	-	-	-	-	-	-	36,500	97,900	33,500	18,000	22,900
15.....	12,200	-	-	-	-	-	-	33,100	83,900	33,100	17,800	22,400
16.....	11,800	-	-	-	-	-	-	30,000	73,500	32,800	17,600	21,300
17.....	11,200	-	-	-	-	-	-	28,700	65,000	32,600	17,800	20,500
18.....	10,600	-	-	-	-	-	-	27,000	64,000	33,200	18,100	19,800
19.....	10,600	-	-	-	-	-	-	24,400	67,500	32,800	18,000	18,800
20.....	10,500	-	-	-	-	-	-	24,800	64,600	33,200	17,800	18,000
21.....	10,200	-	-	-	-	-	-	25,100	57,200	35,300	17,100	17,500
22.....	9,740	-	-	-	-	-	-	26,000	50,200	39,500	16,200	17,400
23.....	9,580	-	-	-	-	-	-	26,700	46,300	40,700	15,800	17,600
24.....	9,340	-	-	-	-	-	-	31,400	43,600	39,000	15,300	18,100
25.....	8,980	-	-	-	-	-	6,420	42,300	42,000	37,100	15,000	18,900
26.....	8,460	-	-	-	-	-	7,500	59,600	41,800	35,700	14,600	18,700
27.....	7,740	-	-	-	-	-	9,500	74,600	39,800	33,900	14,500	18,000
28.....	6,580	-	-	-	-	-	12,600	97,400	38,600	32,800	14,700	17,400
29.....	7,300	-	-	-	-	-	16,500	112,000e	38,400	33,000	15,300	16,600
30.....	6,200	-	-	-	-	-	18,800	124,000	38,100	33,600	16,100	16,100
31.....	5,600	-	-	-	-	-	-	129,000	-	32,900	16,600	-
Mean	10,900	-	-	-	-	-	-	40,000	82,400	34,900	19,200	18,100
Per sq. mi.	0.66	-	-	-	-	-	-	2.41	4.96	2.10	1.16	1.09
Acre-feet in 1,000	668.1	-	-	-	-	-	-	2,461	4,906	2,144	1,182	1,076

The Period..... Discharge: Daily - Maximum 31 May, 129,000e
(184 days) - Minimum 9 November, 4,720

Mean 34,100; Per Square Mile 2.05

Runoff: Acre-feet 12,440,000; Depth in inches on drainage area 14.06

e - Estimated 29 May to 9 June and as indicated.

Backwater effect from Parsnip River from 29 May to 9 June.

Daily Discharge in Cubic Feet per Second for Water Year 1947-48

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	15,700	12,600	-	-	-	-	-	-	<u>200,000</u>	37,500	20,500	24,800
2.....	15,800	12,300	-	-	-	-	-	-	187,000	39,300	20,200	29,300
3.....	16,000	11,700	-	-	-	-	-	-	175,000	41,300	19,900	32,800
4.....	16,700	11,200	-	-	-	-	-	-	160,000	43,000	20,800	34,700
5.....	<u>16,800</u>	10,600	-	-	-	-	-	-	145,000e	<u>43,500</u>	21,200	<u>47,800</u>
6.....	16,100	9,980	-	-	-	-	-	-	136,000	43,300	21,700	38,200
7.....	15,500	9,540	-	-	-	-	-	-	120,000	42,700	21,600	32,300
8.....	14,700	9,420	-	-	-	-	-	-	121,000	40,300	21,600	30,200
9.....	14,200	9,140	-	-	-	-	-	-	119,000	38,700	21,800	28,400
10.....	13,700	8,860	-	-	-	-	-	-	104,000	38,300	21,300	28,100
11.....	13,400	9,060	-	-	-	-	-	-	91,900	38,700	20,600	29,700
12.....	13,500e	9,100	-	-	-	-	-	-	87,300	39,400	20,100	31,500
13.....	13,600	8,940	-	-	-	-	-	24,900	83,600e	38,800	20,700	29,200
14.....	14,400	8,580	-	-	-	-	-	28,600	79,900	37,700	22,000	27,400
15.....	15,300	-	-	-	-	-	-	33,000	79,900	36,300	22,600	26,100
16.....	15,000	-	-	-	-	-	-	36,200	78,800	35,300	21,200	25,100
17.....	15,000	-	-	-	-	-	-	41,700	73,500	34,200	20,500	23,900
18.....	14,400	-	-	-	-	-	-	47,000	70,500	33,200	20,000	23,200
19.....	14,200	-	-	-	-	-	-	52,200	69,000	32,400	19,600	21,900
20.....	13,700	-	-	-	-	-	-	55,600	64,800	31,600	18,800	21,300
21.....	13,200	-	-	-	-	-	-	63,700	64,400	30,700	18,200	22,600
22.....	12,600	-	-	-	-	-	-	94,900	63,300	28,800	17,400	23,200
23.....	12,000	-	-	-	-	-	-	136,000	63,700	28,100	<u>16,500</u>	22,900
24.....	12,300	-	-	-	-	-	-	150,000e	58,100	26,200	<u>17,400</u>	22,000
25.....	13,100	-	-	-	-	-	-	165,000	55,600	24,700	23,600	21,100
26.....	14,000	-	-	-	-	-	-	190,000 ^x	48,100	23,300	27,500	20,400
27.....	14,900	-	-	-	-	-	-	208,000	44,200	22,200	<u>25,500</u>	19,900
28.....	14,500	-	-	-	-	-	-	209,000	41,300	21,500	23,000	<u>21,900</u>
29.....	13,800	-	-	-	-	-	-	210,000	38,700	21,100	21,700	24,200
30.....	13,400	-	-	-	-	-	-	211,000	<u>36,800</u>	20,700	20,700	23,900
31.....	12,800	-	-	-	-	-	-	208,000	-	20,800	21,300	-
Mean	14,300	-	-	-	-	-	-	-	91,000	33,300	21,000	26,900
Per sq. mi.	0.86	-	-	-	-	-	-	-	5.48	2.01	1.27	1.62
Acre-feet in 1,000	881.3	-	-	-	-	-	-	-	5,416	2,050	1,288	1,603

The Period..... Discharge: Daily - Maximum 30 May, 211,000e
 (153 days) - Minimum 23 October, 12,000

Mean 37,000; Per Square Mile 2.23

Runoff: Acre-feet 11,240,000; Depth in inches on drainage area 12.70

e - Estimated 24 May to 5 June and as indicated.

Backwater effect from Parsnip River from 24 May to 5 June.

Daily Discharge in Cubic Feet per Second for Water Year 1948-49

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	22,800	12,900	-	-	-	-	-	6,400e	72,300	49,600	43,000	18,600
2.....	21,900	11,800	-	-	-	-	-	6,550e	84,200	50,400	41,700	18,600
3.....	21,100	10,900	-	-	-	-	-	6,600e	96,100	51,100	41,700	18,600
4.....	20,800	11,300	-	-	-	-	-	6,800e	102,000	50,700	40,300	18,100
5.....	21,300	12,700	-	-	-	-	-	7,000e	106,000	54,200	40,900	17,800
6.....	22,800	12,900	-	-	-	-	-	7,260	104,000	60,000	44,100	17,600
7.....	22,900	9,300	-	-	-	-	-	7,600e	101,000	59,600	44,400	17,100
8.....	21,800	10,500	-	-	-	-	-	7,940	91,800	59,400	42,200	16,700
9.....	21,000	10,800	-	-	-	-	-	10,300e	80,800	60,300	39,300	16,400
10.....	20,600	11,600	-	-	-	-	-	12,700	74,000	60,000	37,400	16,200
11.....	20,700	11,500	-	-	-	-	-	18,600	75,700	61,100	35,800	16,300
12.....	21,300	11,800	-	-	-	-	-	26,000	73,400	64,000	33,900	15,300
13.....	20,700	12,000	-	-	-	-	-	33,200	68,800	66,800	35,100	14,600
14.....	19,800	11,100	-	-	-	-	-	37,900	65,600	68,600	34,300	13,900
15.....	18,900	9,940	-	-	-	-	-	45,400	61,900	68,200	32,400	13,700
16.....	18,200	10,800	-	-	-	-	-	48,800	57,600	67,900e	31,200	13,700
17.....	17,400	9,420	-	-	-	-	-	50,400	54,800	71,900e	29,500	14,600
18.....	17,200	9,260	-	-	-	-	-	51,800	54,300	83,900e	28,200	15,200
19.....	16,700	8,300	-	-	-	-	-	56,300	59,900	82,800e	27,400	15,800
20.....	16,100	8,300	-	-	-	-	-	62,400	69,700	76,200e	26,200	15,900
21.....	15,800	7,660	-	-	-	-	-	65,100	82,900	70,600	24,800	15,600
22.....	15,800	7,020	-	-	-	-	-	68,400	91,200	65,300	23,600	16,400
23.....	15,600	7,660	-	-	-	-	-	76,100	99,400	60,200	22,800	17,700
24.....	15,400	7,620e	-	-	-	-	-	82,600	102,000	55,000	22,200	19,700
25.....	15,000	7,600e	-	-	-	-	-	88,300	101,000	50,100	21,900	21,200
26.....	15,400	7,490e	-	-	-	-	-	86,600	86,900	48,400	21,400	22,600
27.....	14,900	7,390e	-	-	-	-	-	79,100	70,400	51,000	20,700	21,800
28.....	14,800	7,300e	-	-	-	-	-	73,000	59,800	52,100	20,000	20,300
29.....	14,200	7,200e	-	-	-	-	-	67,900	53,400	51,000	19,700	19,300
30.....	13,800	7,000e	-	-	-	-	-	65,100	50,000	48,200	19,300	18,900
31.....	13,300	-	-	-	-	-	-	65,700	-	45,800	18,400	-
Mean	18,300	9,700	-	-	-	-	-	42,800	78,400	60,100	31,100	17,300
Per sq. mi.	1.10	0.58	-	-	-	-	-	2.58	4.72	3.62	1.87	1.04
Acre-feet in 1,000	1,127	577.3	-	-	-	-	-	2,634	4,663	3,698	1,912	1,028

The Period..... Discharge: Daily - Maximum 5 June, 106,000
(214 days) - Minimum 1 May, 6,400e

Mean 36,800; Per Square Mile 2.22

Runoff: Acre-feet 15,640,000; Depth in inches on drainage area 17.65

e - Estimated.

Backwater effect from Parsnip River 16 to 20 July.

Daily Discharge in Cubic Feet per Second for Water Year 1949-50

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	18,500	10,900	9,420	-	-	-	-	7,600e	35,100	57,500	20,500	19,000
2.....	19,200	11,200	10,900	-	-	-	-	8,190	36,300	52,700	19,500	18,400
3.....	19,300	11,500	10,500	-	-	-	-	8,800	41,300	47,500	19,500	18,000
4.....	18,700	11,800	8,260	-	-	-	-	9,560	56,900	43,700	20,000	18,000
5.....	18,000	12,400	6,700	-	-	-	-	10,500	70,500	41,500	19,400	17,300
6.....	17,200	13,200	6,740	-	-	-	-	11,400	80,400	39,700	19,500	17,800
7.....	16,600	15,400	7,100	-	-	-	-	12,900	86,400	39,300	20,200	17,800
8.....	16,000	17,600	6,660	-	-	-	-	14,100	107,000	38,400	21,600	17,800
9.....	15,300	18,400	7,140	-	-	-	-	16,200e	106,000	34,900	23,600	17,200
10.....	15,400	18,600	7,060	-	-	-	-	18,900	116,000e	33,500	25,800	16,600
11.....	15,300	18,200	-	-	-	-	-	21,900	120,000	32,300	26,200	16,000
12.....	15,200	17,600	-	-	-	-	-	26,800	124,000	30,400	25,300	15,400
13.....	14,600	17,000	-	-	-	-	-	32,600	127,000	29,300	24,200	15,000
14.....	14,600e	16,200	-	-	-	-	-	37,100	129,000	28,800	23,100	14,700
15.....	14,700	16,000	-	-	-	-	-	38,300	128,000	29,300	23,300	14,200
16.....	14,900	15,100	-	-	-	-	-	37,700	128,000	30,400	23,900	14,200
17.....	14,400	14,500	-	-	-	-	-	36,000	126,000	30,700	24,000	13,800
18.....	14,500e	14,400	-	-	-	-	-	34,200	124,000	29,900	22,600	13,700
19.....	14,600e	15,200	-	-	-	-	-	30,900	121,000	29,800	21,400	13,500
20.....	14,700e	15,400	-	-	-	-	-	29,800	116,000	30,400	20,400	13,000
21.....	14,300e	14,300	-	-	-	-	-	28,200	114,000	30,900	19,600	12,800
22.....	13,700e	13,100	-	-	-	-	-	26,600	104,000	29,300	19,400	12,600
23.....	13,100	12,500	-	-	-	-	-	25,600	96,900	27,500	19,200	12,800
24.....	12,600	13,800	-	-	-	-	-	24,400	86,000	26,600	19,000	13,400
25.....	12,100	12,800	-	-	-	-	-	24,500	77,900e	26,000	19,900	14,200
26.....	11,600	12,400	-	-	-	-	-	27,400	71,700	25,700	20,500	15,200
27.....	11,400	12,300	-	-	-	-	-	35,100	67,500	25,600	21,200	15,200
28.....	11,200	12,400	-	-	-	-	-	41,000	65,200	25,100	20,500	14,600
29.....	10,900	11,400	-	-	-	-	-	40,300	62,200	24,700	21,300	14,000
30.....	10,900	10,100	-	-	-	-	-	37,700	59,000	22,700	20,700	13,600
31.....	10,900	-	-	-	-	-	-	35,800	-	21,300	19,600	-
Mean	14,700	14,200	-	-	-	-	-	25,500	92,800e	33,100	21,400	15,300
Per sq. mi.	0.89	0.86	-	-	-	-	-	1.54	5.59	1.99	1.29	0.92
Acre-feet in 1,000	901.3	844.4	-	-	-	-	-	1,567	5,521	2,034	1,319	912

The Period.....Discharge: Daily - Maximum 14 June, 129,000e
(214 days) - Minimum 8 December, 6,600

Mean 30,900; Per Square Mile 1.86

Runoff: Acre-feet 13,100,000; Depth in inches on drainage area 14.82

e - Estimated 1 to 9 May, 10 to 25 June and as indicated.
Backwater effect from Parsnip River 10 to 25 June.

Daily Discharge in Cubic Feet per Second for Water Year 1950-51

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	13,000	6,460	-	-	-	-	-	4,500e	48,100	66,200	31,100	13,500
2.....	12,500	5,980	-	-	-	-	-	4,900e	51,000	67,600	30,400	13,400
3.....	11,900	6,380	-	-	-	-	-	5,450e	55,200	67,300	29,400	13,400
4.....	11,400	6,620	-	-	-	-	-	6,380	62,500	69,900	28,100	13,300
5.....	11,100	6,540	-	-	-	-	-	8,540	66,900	74,000	27,700	13,300
6.....	11,000	6,740	-	-	-	-	-	11,500	68,400	77,000	27,000	13,300
7.....	11,000e	5,920	-	-	-	-	-	17,200	66,300	69,900	26,300	13,200
8.....	11,100	-	-	-	-	-	-	25,900	69,800	65,000	25,300	13,100
9.....	11,100	-	-	-	-	-	-	38,700	83,300	63,500	24,200	12,800
10.....	11,100	-	-	-	-	-	-	51,500	84,600	59,600	23,000	12,700
11.....	11,100	-	-	-	-	-	-	64,100e	78,900	55,800	22,800e	12,700
12.....	10,800	-	-	-	-	-	-	76,700	83,300	54,400e	22,700	12,500
13.....	10,500	-	-	-	-	-	-	81,700	98,400	52,900	22,000	12,000
14.....	10,300	-	-	-	-	-	-	85,000	107,000e	54,500	21,100	11,400
15.....	10,200	-	-	-	-	-	-	87,600	115,000	53,700	20,700	10,900
16.....	9,820	-	-	-	-	-	-	88,200	110,000	54,500	20,600	10,500
17.....	9,620	-	-	-	-	-	-	90,600	93,600	57,100	21,700	10,100
18.....	9,140	-	-	-	-	-	-	94,900	77,100	56,400	23,000	10,100
19.....	8,860	-	-	-	-	-	-	97,000	66,800	54,500	22,100e	9,980
20.....	8,100	-	-	-	-	-	-	91,900	60,000	53,300	21,200	9,860
21.....	6,300	-	-	-	-	-	-	87,600	56,200	51,100	20,100	9,660
22.....	6,700	-	-	-	-	-	-	94,600	57,000	47,900	19,300	9,470e
23.....	7,420	-	-	-	-	-	-	105,000	60,900	43,900	18,800	9,280e
24.....	7,660	-	-	-	-	-	-	106,000	64,800	41,200	18,200	9,090e
25.....	7,820	-	-	-	-	-	-	99,600	67,900	39,000	17,400	8,900
26.....	7,660	-	-	-	-	-	-	88,900	73,300	36,800	16,600	8,540
27.....	7,410e	-	-	-	-	-	-	75,500	72,800	35,300	16,200	8,180
28.....	7,170e	-	-	-	-	-	-	65,900	63,600	35,000	15,600	7,820
29.....	6,920	-	-	-	-	-	-	58,900	58,900	34,200	15,000	7,700
30.....	7,100	-	-	-	-	-	-	52,800	61,300	32,900	14,500	7,820
31.....	6,700	-	-	-	-	-	-	49,300	-	31,900	13,900	-
Mean	9,440	-	-	-	-	-	-	61,800	72,800	53,400	21,800	11,000
Per sq. mi.	0.57	-	-	-	-	-	-	3.72	4.39	3.22	1.31	0.66
Acre-feet in 1,000	580.2	-	-	-	-	-	-	3,801	4,330	3,285	1,341	651.6

The Period..... Discharge: Daily - Maximum 15 June, 115,000
(184 days) - Minimum 1 May, 4,500e

Mean 38,300; Per Square Mile 2.31

Runoff: Acre-feet 13,990,000; Depth in inches on drainage area 15.81

e - Estimated.

Daily Discharge in Cubic Feet per Second for Water Year 1951-52

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	7,740	-	-	-	-	-	-	6,570e	81,800	100,000	34,200	19,700
2.....	7,660	-	-	-	-	-	-	7,000	76,100	99,500	34,200	18,700
3.....	7,500	-	-	-	-	-	-	7,480	74,500	95,800	33,500	18,200
4.....	7,420	-	-	-	-	-	-	7,930	72,300	90,000	31,600	18,600
5.....	7,340	-	-	-	-	-	-	8,590	76,900	82,900	30,300	17,900
6.....	7,460	-	-	-	-	-	-	9,000	77,700	77,000e	28,800	17,300
7.....	7,380	-	-	-	-	-	-	9,590	73,300	73,100	27,400	16,600
8.....	-	-	-	-	-	-	-	10,800	65,500	68,700	26,800	15,900
9.....	-	-	-	-	-	-	-	11,600	60,900	74,800	25,700	15,800
10.....	-	-	-	-	-	-	-	12,900	58,200	78,700	24,800	15,300
11.....	-	-	-	-	-	-	-	14,200e	60,900	73,600	23,600	14,800
12.....	-	-	-	-	-	-	-	15,800	66,000	68,600	23,800	14,700
13.....	-	-	-	-	-	-	-	17,800	70,500	65,000	23,300	14,400
14.....	-	-	-	-	-	-	-	20,100	77,700	64,500	23,500	14,700
15.....	-	-	-	-	-	-	-	25,200	83,700	64,500	23,600	14,400
16.....	-	-	-	-	-	-	-	34,400	81,400	66,400	22,700	14,200
17.....	-	-	-	-	-	-	-	42,500	74,200	60,100	21,300	14,600
18.....	-	-	-	-	-	-	-	54,500	66,400	55,700	21,000	14,800
19.....	-	-	-	-	-	-	-	66,600	64,600	53,100	20,400	15,200
20.....	-	-	-	-	-	-	-	79,800	65,000e	52,800	20,200	15,300
21.....	-	-	-	-	-	-	-	86,600	68,800	54,800	19,900	15,700
22.....	-	-	-	-	-	-	-	85,700	73,600	51,700	19,600	15,100
23.....	-	-	-	-	-	-	-	82,100	79,700	50,100	19,200	15,000
24.....	-	-	-	-	-	-	-	73,300	84,000	47,300	19,000	14,600
25.....	-	-	-	-	-	-	-	63,800	86,100	45,900	20,000	14,400
26.....	-	-	-	-	-	-	-	55,500	87,900	45,300	19,400	14,300
27.....	-	-	-	-	-	-	-	52,500	90,000	42,800	19,000	14,600
28.....	-	-	-	-	-	-	-	56,200	93,500	41,500	18,300	15,300
29.....	-	-	-	-	-	-	-	69,000	96,800	38,000	18,200	17,500
30.....	-	-	-	-	-	-	-	84,400	99,200	36,700	20,300	20,100
31.....	-	-	-	-	-	-	-	88,300	-	35,600	20,600	-
Mean	-	-	-	-	-	-	-	40,600e	76,200e	63,000	23,700	15,900
Per sq. mi.	-	-	-	-	-	-	-	2.45	4.59	3.80	1.43	0.96
Acre-feet in 1,000	-	-	-	-	-	-	-	2,499	4,537	3,877	1,456	947.5

The Period..... Discharge: Daily - Maximum 1 July, 100,000e
(153 days) - Minimum 1 May, 6,570e

Mean 43,900; Per Square Mile 2.64

Runoff: Acre-feet 13,320,000; Depth in inches on drainage area 15.04

e - Estimated 1 to 11 May and 20 June to 6 July.

Backwater effect from Parsnip River 20 June to 6 July.

Daily Discharge in Cubic Feet per Second for Water Year 1952-53.

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	21,800	16,200	-	-	-	-	-	6,700	77,300	54,000	38,400	22,100
2.....	22,300	16,000	-	-	-	-	-	6,820	63,800	53,000	36,400	22,000
3.....	22,000	15,900	-	-	-	-	-	6,900	59,500	52,500	35,400	20,800
4.....	23,600	15,700	-	-	-	-	-	7,100	58,500	52,000	33,700	19,800
5.....	23,500	15,200	-	-	-	-	-	7,740	56,500	48,400	32,300	18,900
6.....	21,600	14,200	-	-	-	-	-	9,180	57,900	45,600	30,900	18,600
7.....	21,000	12,900	-	-	-	-	-	13,400	68,000	43,400	30,400	17,800
8.....	20,200	12,200	-	-	-	-	-	20,600	80,800	42,300	29,500	17,400
9.....	20,600	12,000	-	-	-	-	-	29,300	90,700	41,900	28,600	17,300
10.....	21,200	11,000	-	-	-	-	-	32,600	93,700	43,100	27,400	16,900
11.....	21,200	10,900	-	-	-	-	-	32,100	95,500	43,400	25,900	16,800
12.....	21,300	-	-	-	-	-	-	31,100	92,900	44,100e	24,700	16,600
13.....	20,700	-	-	-	-	-	-	27,100	89,200	46,600e	24,100	16,200
14.....	19,400	-	-	-	-	-	-	29,000	85,700	47,100e	22,700	16,000
15.....	18,400	-	-	-	-	-	-	40,900	89,200	46,500e	21,700	15,900
16.....	17,700	-	-	-	-	-	-	60,700	83,700	44,200e	20,600	16,600
17.....	17,100	-	-	-	-	-	-	79,500	75,400	42,500	20,400	17,000
18.....	16,300	-	-	-	-	-	-	97,000	69,900	39,700	20,200	17,600
19.....	15,000	-	-	-	-	-	-	115,000	64,800	39,400	20,400	17,800
20.....	14,500	-	-	-	-	-	-	128,000e	62,000	43,600	21,300	17,800
21.....	15,100	-	-	-	-	-	-	136,000e	57,000	46,100	21,400	18,000
22.....	16,100	-	-	-	-	-	-	132,000e	56,400	44,800	21,400	17,600
23.....	16,700	-	-	-	-	-	-	124,000	58,500	44,800	21,200	17,100
24.....	16,400	-	-	-	-	-	-	112,000	56,800	48,200	20,100	16,800
25.....	16,900	-	-	-	-	-	-	108,000	53,400	51,800	19,600	16,800
26.....	17,900	-	-	-	-	-	-	109,000	51,700	52,200	19,200	16,700
27.....	18,000	-	-	-	-	-	-	111,000	55,200	50,200	19,100	16,400
28.....	16,700	-	-	-	-	-	-	115,000	54,100	44,800	18,500	16,100
29.....	16,400	-	-	-	-	-	-	113,000	60,900	41,900	18,300	16,600
30.....	16,300	-	-	-	-	-	-	107,000	57,400	41,300	18,800	16,900
31.....	16,300	-	-	-	-	-	-	91,900	-	40,300	19,800	-
Mean	18,800	-	-	-	-	-	-	65,800	69,200	45,800	24,600	17,600
Per sq. mi.	1.13	-	-	-	-	-	-	3.96	4.17	2.76	1.48	1.06
Acre-feet in 1,000	1,155	-	-	-	-	-	-	4,046	4,118	2,816	1,512	1,049

The Period..... Discharge: Daily - Maximum 21 May, 136,000e
(184 days) - Minimum 1 May, 6,700

Mean 40,300; Per Square Mile 2.43

Runoff: Acre-feet 14,700,000; Depth in inches on drainage area 16.59

e - Estimated.

Backwater effect from Parsnip River 20 to 22 May and 12 to 16 July.

Daily Discharge in Cubic Feet per Second for Water Year 1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	16,200	20,400	13,500	-	-	-	-	9,680e	151,000	113,000	41,700	25,600
2.....	15,800	20,100	13,000	-	-	-	-	9,700	153,000	120,000	41,300	26,400
3.....	16,000	19,800	12,000	-	-	-	-	9,740	149,000	128,000e	41,500	28,000
4.....	16,000	18,400	9,300	-	-	-	-	9,900	148,000	135,000e	41,900	26,600
5.....	16,600	17,800	7,700	-	-	-	-	10,100	149,000	133,000e	41,900	25,200
6.....	17,100	17,600	7,300	-	-	-	-	10,300	148,000	129,000	41,900	23,800
7.....	17,300	16,600	7,300	-	-	-	-	9,940	149,000	108,000	41,900	23,100
8.....	17,600	16,000	7,660	-	-	-	-	9,420	151,000	98,400	42,500	22,000
9.....	17,800	14,800	8,100	-	-	-	-	8,700	150,000e	98,200	41,500	21,700
10.....	18,000	14,900	8,620	-	-	-	-	11,200	152,000e	92,600	40,900	21,400
11.....	18,700	15,200	8,380	-	-	-	-	10,100	153,000e	80,500	40,300	21,400
12.....	20,200	15,600	8,100	-	-	-	-	10,900	154,000e	74,700	39,900	21,000
13.....	22,900	15,300	7,900	-	-	-	-	12,200	152,000e	70,100	40,300	21,400
14.....	26,100	15,500	8,220	-	-	-	-	15,400	146,000e	65,700	40,100	23,600
15.....	26,200	15,600	8,500	-	-	-	-	18,700	136,000	62,800	39,700	24,000
16.....	25,600	15,600	8,460	-	-	-	-	20,900	115,000	62,200	38,600	23,100
17.....	26,200	15,000	8,300	-	-	-	-	23,000	107,000	62,800	38,200	23,100
18.....	29,000	13,400	8,100	-	-	-	-	27,000	107,000	60,700	37,000	22,400
19.....	29,400	13,300	7,900	-	-	-	-	32,800	116,000	60,200	35,400	21,400
20.....	28,900	13,000	8,380	-	-	-	-	40,900	123,000	60,000	33,500	21,000
21.....	28,300	12,700	8,660	-	-	-	-	49,500	141,000	57,500	32,300	20,800
22.....	26,800	12,500	8,900	-	-	-	-	50,200	150,000	53,000	31,800	20,400
23.....	26,400	12,800	9,140	-	-	-	-	50,500	147,000	49,500	30,700	20,600
24.....	23,400	13,000	9,180	-	-	-	-	55,500	131,000	47,200	28,800	20,500
25.....	22,000	13,100	9,020	-	-	-	-	67,200	112,000	44,500	27,700	20,600
26.....	21,600	13,100	8,500	-	-	-	-	93,300	103,000	42,500	26,600	21,300
27.....	21,200	13,300	8,220	-	-	-	-	130,000	104,000	43,200	26,100	23,400
28.....	20,900	13,500	7,580	-	-	-	-	143,000	106,000	45,000	25,500	25,600
29.....	20,200	13,600	7,360e	-	-	-	-	141,000	110,000	44,800	24,000	25,900
30.....	21,700	13,800	7,000e	-	-	-	-	139,000	114,000	42,500	23,400	23,600
31.....	21,000	-	6,790e	-	-	-	-	145,000	-	41,900	23,800	-
Mean	21,800	15,200	8,620	-	-	-	-	44,300	134,000	75,000	35,500	23,000
Per sq. mi.	1.31	0.92	0.52	-	-	-	-	2.67	8.07	4.52	2.14	1.39
Acre-feet in 1,000	1,339	903.1	529.7	-	-	-	-	2,727	7,987	4,615	2,183	1,366

The Period..... Discharge: Daily - Maximum 12 June, 154,000e
 (245 days) - Minimum 31 December, 6,790e

Mean 44,600; Per Square Mile 2.69

Runoff: Acre-feet 21,650,000; Depth in inches on drainage area 24.46

e - Estimated.

Backwater effect from Parsnip River 9 to 14 June and 3 to 5 July.

Daily Discharge in Cubic Feet per Second for Water Year 1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	22,300	18,400	11,600	-	-	-	-	2,380e	24,500	124,000e	39,900	18,800
2.....	21,700	18,200	11,600	-	-	-	-	2,430e	26,300	110,000	40,700	19,800
3.....	21,300	17,200	11,800	-	-	-	-	2,490e	28,300	108,000	42,400	20,300
4.....	20,700	16,800	11,900	-	-	-	-	2,550e	29,300	108,000	42,400	20,300
5.....	20,400	17,600	12,000	-	-	-	-	2,620	29,200	109,000	47,700	19,600
6.....	20,100	18,200	12,000	-	-	-	-	2,840	30,400	109,000	36,000	19,000
7.....	20,100	18,800	11,500	-	-	-	-	2,770	30,600	111,000	35,300	18,800
8.....	19,600	18,400	10,800	-	-	-	-	2,770	29,200	110,000	34,200	17,500
9.....	18,000	17,700	10,500	-	-	-	-	2,900	30,400	110,000	34,200	16,600
10.....	17,800	16,800	10,300	-	-	-	-	2,940	38,400	108,000	32,500	16,000
11.....	18,400	17,400	9,900	-	-	-	-	3,080	67,000	106,000	30,400	15,200
12.....	20,100	16,400	10,300	-	-	-	-	3,120	103,000	99,800	30,000	14,800
13.....	20,800	14,200	9,900	-	-	-	-	3,290	117,000	89,800	29,200	14,500
14.....	20,200	13,700	10,200	-	-	-	-	3,540	112,000	80,000	27,800	14,200
15.....	19,800	14,000	10,300	-	-	-	-	3,880	101,000	69,200	29,900	14,400
16.....	18,900	14,400	10,500	-	-	-	-	4,940	91,100	58,900	26,300	14,400
17.....	19,200	14,800	10,700	-	-	-	-	7,260	84,800	52,100	26,800	15,000
18.....	20,100	15,100	10,700	-	-	-	-	9,780	78,200	48,100	27,600	15,200
19.....	22,800	15,300	11,000	-	-	-	-	14,200	73,400	48,700	28,300	14,600
20.....	23,800	15,000	11,800	-	-	-	-	19,200	66,500	51,900	27,900	14,200
21.....	26,200	14,600	12,400	-	-	-	-	19,800	64,300	53,400	26,300	14,000
22.....	26,400	14,300	12,200	-	-	-	-	19,200	69,600	51,400	25,400	14,000
23.....	25,000	13,900	11,600e	-	-	-	-	17,200	85,900	47,900	24,500	13,500
24.....	23,400	13,800	11,000e	-	-	-	-	17,000	112,000	44,900	23,200	12,900
25.....	22,600	13,600	10,700	-	-	-	-	17,400	121,000e	44,400	22,200	12,500
26.....	21,700	13,800	10,400	-	-	-	-	17,800	134,000e	47,100	21,300	12,900
27.....	21,900	13,400	9,900	-	-	-	-	18,600	144,000e	48,900	20,800	14,200
28.....	22,000	13,100	8,820e	-	-	-	-	20,600	150,000e	46,900	20,700	15,200
29.....	21,300	12,900	7,900e	-	-	-	-	24,200	143,000e	44,400	19,900	14,800
30.....	20,200	12,100	7,000e	-	-	-	-	24,100	134,000e	42,600	19,400	14,400
31.....	19,000	-	6,700e	-	-	-	-	24,400	-	41,600	18,800	-
Mean	21,200	15,500	10,600	-	-	-	-	10,300	78,300	75,000	29,400	15,700
Per sq. mi.	1.28	0.93	0.64	-	-	-	-	0.62	4.72	4.52	1.77	0.95
Acre-feet in 1,000	1,301	920.1	650.4	-	-	-	-	633.3	4,658	4,612	1,809	935.4

The Period..... Discharge: Daily - Maximum 28 June, 150,000e
(245 days) - Minimum 1 May, 2,380e

Mean 31,900; Per Square Mile 1.92

Runoff: Acre-feet 15,520,000; Depth in inches on drainage area 17.55

e - Estimated.

Backwater effect from Parsnip River 25 June to 1 July.

Daily Discharge in Cubic Feet per Second for Water Year 1955-56

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	14,300	7,900	-	-	-	-	-	5,400b	61,100	65,000	26,400	19,600
2.....	14,300	5,780	-	-	-	-	-	5,560b	80,200	68,800	26,400	21,400
3.....	14,000	4,830	-	-	-	-	-	5,780	89,900	70,100	26,800	23,700
4.....	13,800	4,200	-	-	-	-	-	5,880	91,200	69,000	26,600	23,200
5.....	13,800	3,850	-	-	-	-	-	6,300	91,500	68,800	26,000	21,900
6.....	13,800	3,850	-	-	-	-	-	6,620	102,000	69,400	25,500	21,200
7.....	13,600	3,850	-	-	-	-	-	8,100	115,000	67,700	24,800	20,200
8.....	13,400	-	-	-	-	-	-	8,780	105,000	65,300	24,200	19,900
9.....	13,400	-	-	-	-	-	-	9,980	83,700	60,600	25,200	21,700
10.....	13,100	-	-	-	-	-	-	11,200	70,900	55,500	25,000	20,500
11.....	13,000	-	-	-	-	-	-	17,700	62,200	53,500	24,300	20,900
12.....	12,900	-	-	-	-	-	-	19,300	59,000	53,800	23,400	19,900
13.....	12,700	-	-	-	-	-	-	18,600	58,200	53,200	22,600	24,200
14.....	12,400	-	-	-	-	-	-	11,300	56,500	50,800	22,400	23,000
15.....	12,900	-	-	-	-	-	-	12,900	57,200	49,500	22,300	21,900
16.....	13,400	-	-	-	-	-	-	14,400	60,600	47,200	22,000e	21,300
17.....	12,500	-	-	-	-	-	-	18,800	65,400	44,100	21,700	20,600
18.....	12,200	-	-	-	-	-	-	32,100	70,100	43,800	21,000	17,400
19.....	11,100	-	-	-	-	-	-	44,800	70,900	43,600	20,800	16,600
20.....	10,800	-	-	-	-	-	-	56,000	81,800	42,700	20,200	16,400
21.....	10,700	-	-	-	-	-	-	73,700	98,500	40,900	19,700	15,600
22.....	10,500	-	-	-	-	-	-	75,300	95,200	40,300	19,800	14,800
23.....	9,900	-	-	-	-	-	-	67,200	80,500	40,300	20,200	14,600
24.....	9,700	-	-	-	-	-	-	61,100	71,100	38,900	20,800	14,800
25.....	9,500	-	-	-	-	-	-	62,400	67,700	32,300	21,700	15,200
26.....	9,180	-	-	-	-	-	-	65,700	65,700	34,600	21,300	14,500
27.....	9,580	-	-	-	-	-	-	67,200	60,600	33,500	20,800	14,000
28.....	9,700	-	-	-	-	-	-	65,300	57,000	32,900	20,200	13,600
29.....	9,900	-	-	-	-	-	-	55,800	58,000	31,200	19,700	13,300
30.....	9,900	-	-	-	-	-	-	49,900	59,500	29,000	19,300	13,000
31.....	9,580	-	-	-	-	-	-	50,200	-	27,400	19,200	-
Mean	11,900	-	-	-	-	-	-	32,700	74,900	49,200	22,600	18,600
Per sq. mi.	0.72	-	-	-	-	-	-	1.97	4.51	2.96	1.36	1.12
Acre-feet in 1,000	7,330	-	-	-	-	-	-	2,010	4,455	3,022	1,389	1,109

The Period..... Discharge: Daily - Maximum 7 June, 115,000
 (184 days) - Minimum 5, 6 and 7 November, 3,850

Mean 34,800; Per Square Mile 2.10

Runoff: Acre-feet 12,720,000; Depth in inches on drainage area 14.36

e - Estimated.

b - Ice conditions.

Daily Discharge in Cubic Feet per Second for Water Year 1956-57

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	12,700	-	-	-	-	-	-	11,800	71,300	64,000	48,200	32,800
2.....	12,500	-	-	-	-	-	-	11,600	72,900	64,600	46,500	31,700
3.....	12,000	-	-	-	-	-	-	15,200	78,700	61,000	42,500	30,500
4.....	11,600	-	-	-	-	-	-	20,800	89,500	57,900	39,800	29,300
5.....	11,600	-	-	-	-	-	-	25,300	101,000	55,400	38,700	27,700
6.....	11,500	-	-	-	-	-	-	27,500	107,000	52,000	37,800	29,200
7.....	12,400	-	-	-	-	-	-	28,400	106,000	49,000	37,400	34,600
8.....	13,000	-	-	-	-	-	-	27,500	103,000	47,400	37,500	38,400
9.....	13,300	-	-	-	-	-	-	26,500	99,000	44,500	36,300	35,900
10.....	13,400	-	-	-	-	-	-	29,800e	95,600	42,900	37,500	33,300
11.....	13,600	-	-	-	-	-	-	33,200	90,000	41,400	37,300	30,800
12.....	13,600	-	-	-	-	-	-	38,200	88,200	41,900	37,500	28,900
13.....	13,400	-	-	-	-	-	-	40,800	91,300	42,400	37,700	28,800
14.....	13,100	-	-	-	-	-	-	43,300	87,400	43,300	39,700	28,000
15.....	12,700	-	-	-	-	-	-	49,900	76,000	43,400	39,200	26,500
16.....	12,200	-	-	-	-	-	-	56,300	67,400	47,300	36,800	25,600
17.....	12,100	-	-	-	-	-	-	60,800	62,200	61,900	34,000	23,900
18.....	12,000	-	-	-	-	-	-	77,900	59,100	64,700	31,600	22,700
19.....	11,300	-	-	-	-	-	-	94,200	57,000	59,100	29,700	21,700
20.....	11,100	-	-	-	-	-	-	116,000e	54,200	54,900	29,200	20,900
21.....	11,300	-	-	-	-	-	-	132,000e	54,500	53,500	29,000	20,100
22.....	10,900	-	-	-	-	-	-	139,000e	55,700	54,300	29,100	19,400
23.....	10,500	-	-	-	-	-	-	144,000e	54,400	59,300	28,300	18,300
24.....	9,980	-	-	-	-	-	-	145,000e	52,200	62,000	33,300	18,100
25.....	9,610e	-	-	-	-	-	-	143,000e	50,200	60,600	58,600	17,600
26.....	9,340	-	-	-	-	-	-	138,000e	46,600	55,800	59,400	17,200
27.....	8,220	-	-	-	-	-	-	124,000e	42,900	52,300	50,400	16,500
28.....	5,080	-	-	-	-	-	-	109,000	42,300	50,500	43,800	16,600
29.....	4,200	-	-	-	-	-	-	92,200	45,900	47,100	39,500	16,200
30.....	3,920	-	-	-	-	-	-	81,700	57,000	44,800	36,600	16,400
31.....	3,680	-	-	-	-	-	-	74,300	-	45,100	34,300	-
Mean	10,800	-	-	-	-	-	-	69,600	72,000	52,400	38,600	25,300
Per sq. mi.	0.65	-	-	-	-	-	-	4.19	4.34	3.16	2.33	1.52
Acre-feet in 1,000	666.1	-	-	-	-	-	-	4,279	4,281	3,222	2,375	1,503

The Period..... Discharge: Daily - Maximum 24 May, 145,000e
(184 days) - Minimum 31 October, 3,680

Mean 44,700; Per Square Mile 2.69

Runoff: Acre-feet 16,330,000; Depth in inches on drainage area 18.45

e - Estimated.

Backwater effect from Parsnip River 20 to 27 May.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	17,700	10,900	-	-	4,720 ^b	4,000	-	10,200	136,000	41,800	17,000	10,800
2.....	18,000	10,100	-	-	4,670	4,050	-	12,900	127,000 ^e	39,300	17,000	10,800
3.....	18,900	9,740	-	-	4,600	4,100	-	14,900	118,000	37,900	16,600	10,900
4.....	19,700	9,580	-	-	4,520	4,120	-	16,700	109,000	36,700	15,400	10,800
5.....	19,200	9,580	-	-	4,500	4,180	-	18,500	106,000	35,400	14,800	10,400
6.....	18,900	8,940	-	-	4,370	4,200	-	19,900	107,000	34,700	14,600	10,100
7.....	18,400	8,300	-	-	4,320	4,300	-	21,000	110,000	33,700	14,700	9,940
8.....	17,900	7,580	-	-	4,270	4,370	-	22,400	111,000	33,700	15,600	9,700
9.....	17,000	6,540	-	-	4,220	4,400	-	24,100	111,000	33,900	17,200	9,460
10.....	16,000	6,090	-	-	4,200	4,400	-	24,700	108,000	33,900	16,700	9,500
11.....	14,700	5,810	-	-	4,150	4,340	-	23,800	97,800	32,300	15,600	9,380
12.....	13,900	6,160	-	-	4,050	4,250	-	22,200	85,600	30,900	15,100	9,260
13.....	13,800	6,780	-	-	4,030	4,150	-	20,800	79,600	29,800	14,500	9,420
14.....	13,800	7,260	-	-	4,000	4,100	-	19,200	77,100	28,700	14,100	9,740
15.....	13,600	7,580	-	-	3,990	4,100	-	20,200	72,800	26,200	13,900	10,000
16.....	13,400	7,700	-	-	3,900	4,100	-	22,200	66,200	24,900	14,400	10,400
17.....	13,200	7,540	-	-	3,880	4,100	-	24,200	59,400	23,700	14,300	10,800
18.....	12,700	7,420	-	-	3,880	4,160	-	25,100	56,000	22,900	14,400	10,900
19.....	12,200	7,260	-	-	3,880	4,200	-	26,700	54,000	22,300	13,800	11,600
20.....	11,600	7,100	-	-	3,870	4,250	-	32,600	50,600	21,800	13,000	12,100
21.....	11,400	6,660	-	-	3,870	4,300	-	44,800	46,700	21,200	12,600	12,700
22.....	11,000	5,740	-	-	3,850	4,330	-	58,800	43,900	20,900	12,500	13,000
23.....	11,300 ^e	5,180	-	-	3,830	4,380	-	77,000 ^e	41,900	20,500	12,400	13,100
24.....	8,820	5,040	-	-	3,850	4,400	-	91,000	39,800	19,600	12,700	12,800
25.....	8,580	4,830	-	-	3,870	4,450	-	107,000	37,800	18,600	12,700	12,500
26.....	8,820	4,580	-	-	3,880	4,500	6,020	121,000	37,300	18,200	12,600	12,400
27.....	9,300	4,550	-	-	3,900	4,540	6,460	131,000	37,200	18,000	12,400	12,000
28.....	11,200	6,230	-	-	3,950	4,600	6,820	136,000	36,800	17,500	12,200	11,800
29.....	11,400	7,340	-	-	-	4,700	7,420	138,000	39,000	17,100	11,800	11,600
30.....	11,200	7,020	-	-	-	4,760	8,220	142,000	42,000	16,900	11,300	11,400
31.....	11,300	-	-	-	-	4,800 ^b	-	140,000	-	16,800	10,900	-
Mean	13,800	7,170	-	-	4,110	3,670	-	51,900	74,800	26,800	14,100	11,000
Per sq. mi.	0.83	0.43	-	-	0.25	0.22	-	3.13	4.51	1.61	0.85	0.66
Acre-feet in 1,000	850.8	426.7	-	-	228.1	225.4	-	3,191	4,452	1,646	866.4	653.2

The Period..... Discharge: Daily - Maximum 30 May, 142,000^e
 (273 days) - Minimum 23 February, 3,830

Mean 23,200; Per Square Mile 1.40

Runoff: Acre-feet 12,540,000; Depth in inches on drainage area 14.17

b - Ice conditions 1 February to 31 March.

e - Estimated 23 May to 2 June and as indicated.

Backwater effect from Parsnip River from 23 May to 2 June.

PARSNIP RIVER NEAR FINLAY FORKS - STATION No. 7EE₂

Location: Lat. 55° 50' 52", long. 123° 45' 43", British Columbia, approximately sixteen miles upstream from mouth.
 Drainage Area: 7,750 square miles. Gauge: Recording. Measurement of Discharge: From cable. Period of Record:
 Miscellaneous measurements 1944 to 1949 and 1957; part-year records October 1957 to date. Extremes Recorded:
 Daily - Maximum, 26 May 1958, 75,200 cfs, Minimum, 31 August 1958, 2,720 cfs; Instantaneous Maximum, 10 a.m., 26 May 1958, 75,700 cfs. Records excellent; fair during ice period.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	6,850e	19,900	-	-	3,770b	3,300	-	20,000e	60,400	14,200	3,740	2,870
2.....	6,800	15,600	-	-	3,750	3,350	-	24,000e	55,200	13,000	3,650	3,420
3.....	7,000	12,100	-	-	3,720	3,400	-	27,800e	50,600	12,000	3,650	5,060
4.....	7,050	10,100	-	-	3,710	3,500	-	31,600e	46,900	11,200	3,610	5,320
5.....	6,950	8,960	-	-	3,700	3,550	-	37,100x	44,400	10,600	3,500	4,640
6.....	6,750	8,200	-	-	3,600	3,600	-	37,600	42,200	10,200	3,550	4,180
7.....	6,650	7,860	-	-	3,600	3,580	-	39,600	41,100	9,630	3,690	3,830
8.....	6,700	7,510	-	-	3,570	3,620	-	42,100	40,200	9,280	3,970	3,630
9.....	6,800	7,000	-	-	3,530	3,640	-	45,400	38,300	8,900	4,360	3,470
10.....	7,000	6,780	-	-	3,510	3,640	-	46,600	36,200	8,350	4,320	3,410
11.....	6,600	6,730	-	-	3,500	3,550	-	43,900	32,600	7,980	4,000	3,350
12.....	6,400	6,630	-	-	3,410	3,500	-	40,400	29,400	7,700	3,690	3,350
13.....	6,000	6,780	-	-	3,400	3,500	-	37,600	27,100	7,510	3,550	3,350
14.....	5,650	7,000	-	-	3,400	3,500	-	36,200	25,300	7,200	3,470	3,350
15.....	5,400	7,020	-	-	3,310	3,450	-	37,600	25,000	6,820	3,400	3,360
16.....	5,200e	6,820	-	-	3,300	3,420	-	42,100	23,800	6,510	3,340	3,380
17.....	5,100x	6,510	-	-	3,290	3,450	-	43,700	21,800	6,140	3,290	3,550
18.....	4,930	6,280	-	-	3,280	3,500	-	42,100	20,600	5,820	3,260	4,050
19.....	4,730	5,940	-	-	3,270	3,500	-	42,000	19,100	5,590	3,200	5,500x
20.....	4,560	6,230	-	-	3,270	3,550	-	46,100	17,900	5,380	3,170	6,880x
21.....	4,470	6,530	-	-	3,250	3,580	-	54,300	16,800	5,290	3,080	8,620x
22.....	4,180	6,330	-	-	3,210	3,620	-	62,800	15,600	5,120	3,020	9,020x
23.....	3,680	6,190	-	-	3,210	3,680	-	68,300	14,800	4,930	2,900	10,600x
24.....	3,480	6,000b	-	-	3,220	3,700	-	71,600	13,700	4,790	2,870	8,840x
25.....	3,580	6,000	-	-	3,240	3,750	-	74,700	12,900	4,640	2,860	7,730x
26.....	3,930	5,900	-	-	3,240	3,780	-	75,200	12,100	4,450	2,800	9,440x
27.....	4,180	5,770	-	-	3,240	3,820	-	73,000	11,700	4,320	2,750	15,000x
28.....	4,380	5,650	-	-	3,260	3,870	-	70,500	11,700	4,180	2,750	20,800x
29.....	4,850	5,620	-	-	-	3,940	-	70,300	12,800	4,050	2,750	21,500x
30.....	7,560	5,590b	-	-	-	4,000	-	69,100	14,600	3,850	2,750	17,700x
31.....	17,000	-	-	-	-	4,100b	-	65,200	-	3,830	2,720	-
Mean	5,950e	7,650	-	-	3,420	3,610	-	49,000	27,800	7,210	3,340	6,970
Per sq. mi.	0.77	0.99	-	-	0.44	0.47	-	6.32	3.59	0.93	0.43	0.90
Acre-feet in 1,000	365.8	455.3	-	-	189.9	222	-	3,012	1,656	443.4	205.6	414.9

The Period..... Discharge: Daily - Maximum 26 May, 75,200

(273 days)

- Minimum 31 August, 2,720

Instantaneous Maximum 10 a.m., 26 May, 75,700

Mean 12,900; Per Square Mile 1.66

Runoff: Acre-feet 6,965,000; Depth in inches on drainage area 16.86

e - Estimated 1 to 16 October and as indicated.

x - Staff gauge readings.

b - Ice conditions 24 to 30 November and 1 February to 31 March.

Location: Lat. 55° 12' 00", long. 124° 14' 00", British Columbia, just downstream from Fort St. James-Manson Creek road bridge, six miles below outlet of Chuchi Lake and seventy-four miles north of Fort St. James. Drainage Area: 1,600 square miles. Gauge: Recording. Measurement of Discharge: From bridge. Period of Record: Miscellaneous measurements in 1951 and 1952; mainly open water June 1938 to September 1950 and October 1954 to date. Extremes Recorded: Daily - Maximum, 6 June 1948, 17,200 cfs, Minimum, 5 to 11 April 1944, 194 cfs. Revisions: Drainage area, W.R.P. 117. Remarks: Records good.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	1,500	953	1,140	-	-	-	-	1,120e	15,800	3,740	842	562
2.....	1,400	935	1,140	-	-	-	-	1,230e	15,300	3,640	800	610
3.....	1,340	944	1,250	-	-	-	-	1,370e	14,600	3,600	810	618
4.....	1,290	935	-	-	-	-	-	1,630e	13,800	3,450	810	658
5.....	1,260	935	-	-	-	-	-	1,940e	13,200	3,320	780	646
6.....	1,240	926	-	-	-	-	-	2,300e	12,400	3,240	785	638
7.....	1,180	882	-	-	-	-	-	2,700e	11,900	3,100	810	650
8.....	1,150	858	-	-	-	-	-	2,980	11,300	2,980	795	626
9.....	1,120	858	-	-	-	-	-	3,480	10,700	2,860	785	650
10.....	1,080	842	-	-	-	-	-	3,900	10,200	2,760	760	638
11.....	1,070	858	-	-	-	-	-	4,170	9,630	2,680	755	650
12.....	1,050	866	-	-	-	-	-	5,200	9,100	2,690	780	658
13.....	1,030e	890	-	-	-	-	-	5,710	8,590	2,350	730	670
14.....	990e	874	-	-	-	-	-	5,830	8,230	2,210	714	646
15.....	970e	866	-	-	-	-	-	6,100	7,710	2,080	706	626
16.....	945e	874	-	-	-	-	-	6,410	7,230	1,960	686	654
17.....	918e	834	-	-	-	-	-	6,640	6,840	1,820	662	674
18.....	890e	882	-	-	-	-	-	6,950	6,300	1,720	630	686
19.....	860e	850	-	-	-	-	-	7,370	6,060	1,640	634	730
20.....	830e	810	-	-	-	-	-	8,160	5,520	1,560	614	735
21.....	818	770	-	-	-	-	-	9,330	5,180	1,470	606	775
22.....	786	818	-	-	-	-	-	10,700	4,800	1,390	590	795
23.....	738	890	-	-	-	-	-	12,000	4,490	1,270	602	780
24.....	810	944	-	-	-	-	-	13,400	4,160	1,200	578	795
25.....	714	1,040	-	-	-	-	-	14,400	3,950	1,180	570	872
26.....	810	1,050	-	-	-	-	-	15,100	3,640	1,140	534	848
27.....	738	1,070	-	-	-	-	-	15,600	3,470	1,060	522	939
28.....	810	1,090	-	-	-	-	-	16,000	3,470	995	494	1,040
29.....	770	1,080	-	-	-	-	-	16,400	3,610	946	482	1,090
30.....	935	1,180	-	-	-	-	-	16,600	3,720	960	482	1,150
31.....	980	-	-	-	-	-	-	16,200e	-	904	490	-
Mean	1,000	920	-	-	-	-	-	7,770	8,160	2,130	672	737
Per sq. mi.	0.62	0.58	-	-	-	-	-	4.86	5.10	1.33	0.42	0.46
Acre-feet	61,530	54,750	-	-	-	-	-	477,900	485,800	130,700	41,330	43,850

The Period..... Discharge: Daily - Maximum 30 May, 16,600
 (214 days) - Minimum 29 and 30 August, 482
 Mean 3,050; Per Square Mile 1.91
 Runoff: Acre-feet 1,296,000; Depth in inches on drainage area 15.17

e - Estimated.

Location: Lat. 55° 43', long. 117° 37', in E. 1/2 sec. 34, tp. 77, rge. 24, W. 5th Mer., Alberta, at highway bridge about eight miles below confluence with Little Smoky River and thirty-five miles above confluence with Peace River. **Drainage Area:** 18,500 square miles. **Gauge:** Recording. **Measurement of Discharge:** From cableway. **Period of Record:** June 1915 to November 1921, May to October 1922 and May 1955 to date. Records prior to 20 May 1955 obtained by manual gauges. Prior to 15 June 1916, records were obtained in SW. 1/4 sec. 10, tp. 78. From June 1916 to October 1922 records were obtained in SW. 1/4 sec. 2, tp. 78. The 1915 and 1916 records were published under the title "at Prudent's Ranch", and records for 1917 to 1922 under the title "at Smoky". **Average Discharge:** (9 years) - 12,610 cfs. **Extremes Recorded:** Daily - Maximum, 2 June 1955, 159,200 cfs, Minimum, 12 December 1956, 494 cfs (discharge measurement under ice conditions); Instantaneous Maximum - at noon, 2 June 1955, 163,200 cfs. **Revisions:** The April 1921 mean discharge was published in error in W.R.P. 36 and should be 17,352 cfs. **Remarks:** Records good during open-water periods and fair during ice period. As a result of information obtained from local residents, a discharge of 225,000 cfs is estimated to have occurred during a flood in 1954.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	6,970	25,560	4,720	8,730	2,750	1,410	2,000	14,660	65,180	60,340	8,040	5,040
2.....	6,840	26,090	4,070	8,440	2,500	1,380	2,350	16,570	50,660	53,960	7,960	5,520
3.....	7,110	22,810	3,720	8,440	2,550	1,430	2,710	19,370x	42,000	44,300	7,690	6,800
4.....	8,580	20,220	3,070	9,300	2,270	1,520	2,590	22,190	35,000	36,350	7,130	7,560
5.....	9,090	21,400	3,030	9,300	2,250	1,510	4,540	24,660	32,140	30,170	6,340	6,580
6.....	8,260	17,020	2,390	9,300	2,320	1,500	6,400	27,280	30,880	27,150	6,050	5,710
7.....	7,040	16,370	1,760	8,870	1,980	1,500	16,220	27,870	30,380	24,780	5,940	5,150
8.....	7,180	14,450	2,060	8,660	1,760	1,490	11,990	28,660	31,400	21,910	6,400	4,840
9.....	7,380	12,550b	1,820	9,120	2,150	1,500	5,510	30,960	31,540	19,060x	6,580	4,680
10.....	7,460	11,640	1,560	6,600	2,030	1,330	7,280	33,300	31,620	17,950	7,030	4,890
11.....	7,350	10,830	6,870	6,010	1,920	1,300	9,970	31,840	30,520	16,960	6,640	5,040
12.....	7,490	11,060	6,730	5,510	1,790	1,290	19,430	28,660	27,220	16,330	6,250	5,710
13.....	8,260	9,930	6,430	5,330	1,580	1,220	17,370	26,500	23,730	16,130	6,190	5,990
14.....	9,970	8,870	6,200	5,390	1,160	1,050	16,570	26,890	21,200	15,990	6,190	6,220
15.....	14,450	8,160	6,040	5,300	1,120	1,120	18,910	25,420	20,670	15,460	6,110	5,960
16.....	21,180	6,700	5,160	4,310	1,250	1,080	25,760	24,600	21,360	15,370	5,960	5,470
17.....	21,960	5,300	4,190	3,950	1,460	1,160	31,540	28,330	20,510	14,620	5,800	4,910
18.....	20,170	3,000	3,350	3,540	1,380	1,460	28,670	29,890	18,650	13,900	5,910e	4,480
19.....	17,930	1,890	3,300	3,190	1,290	1,390	28,600b	26,310	19,110	13,120	6,020	4,480
20.....	16,030	1,770	3,200	2,920	1,220	1,360	24,720	25,290	19,890	12,380	6,430x	4,780
21.....	14,680	2,050	3,100	4,340	1,190	1,450	23,970	28,330	19,160	11,510	5,740	4,810
22.....	13,740	2,500	3,600	4,380	1,300	1,580	23,260	35,590	18,050	11,400	5,440	5,340
23.....	11,100	4,210	4,100	4,340	1,390	1,370	19,420	38,770	17,500	10,970	5,360	5,310
24.....	7,380	6,140	4,590	3,970	1,430	1,330	18,550	42,810	17,850	10,560	5,360	5,020
25.....	5,240	7,980	6,460	3,630	1,410	1,320	16,420	43,200	17,850	9,920	5,250	4,760
26.....	5,940	9,970	8,870	3,970	1,380	1,360	13,940	44,900	17,250	9,360	5,470	4,400
27.....	8,400	9,930	9,020	3,630	1,410	1,340	11,860	42,810	18,100	9,180	5,880	4,110
28.....	11,370	10,490	9,160	3,520	1,410	1,330	8,100	38,510	22,350	8,850	6,550	4,230
29.....	11,600	8,160	9,020	3,190	-	1,410	10,820	37,900	62,370	8,810	6,740	4,180
30.....	12,190x	5,850	8,870	3,050	-	1,480	13,080	42,780	81,230	8,460	5,440	11,010
31.....	15,690	-	8,870	3,030	-	1,640	-	72,740	-	8,100	4,990	-
Mean	10,900	10,760	5,011	5,589	1,702	1,375	14,750	31,860	29,850	19,140	6,222	5,433
Per sq. mi.	0.59	0.58	0.27	0.30	0.09	0.07	0.80	1.72	1.61	1.03	0.34	0.29
Acre-feet in 1,000	670.5	640.5	308.1	343.7	94.5	84.52	877.8	1,959	1,776	1,177	382.6	323.3

The Year..... Discharge: Daily - Maximum 30 June, 81,230

- Minimum 14 March, 1,050

Instantaneous Maximum 2 a.m., 30 June, 90,590

Mean 11,930; Per Square Mile 0.64

Runoff: Acre-feet 8,638,000; Depth in inches on drainage area 8.75

b - Ice conditions 9 November to 19 April.

e - Estimated.

x - Wire-weight gauge readings 30 October to 3 May and 9 July to 20 August.

SLAVE RIVER AT FITZGERALD - STATION No. 7NB₁

Location: Lat. 59° 52', long. 111° 36', in river lot 18, in NW. 1/4 sec. 13, tp. 125, rge. 10, W. 4th Mer., Alberta, on Northern Transportation Company dock about one and one-half miles above Cassette Rapids. Drainage Area: Approximately 234,000 square miles. Gauge: Staff. Measurement of Discharge: From boat. Period of Record: Periods of varying length in 1921 and 1922, 1930 and 1931 and 1953 to date. During 1921 and 1922, records were obtained about one-half mile above and in 1930 and 1931 about one-half mile below the present site. Extremes Recorded: Daily - Maximum, 28 June 1921, 315,520 cfs (corrected), Minimum, 23 March 1953, 18,620 cfs (estimated). Revisions: The formerly published estimate for the peak discharge for 1935 has been discredited. Remarks: Daily discharges for the years 1953 to 1957 are included in this paper. Records good during open-water period and fair during ice period.

Daily Discharge in 1,000 Cubic Feet per Second for Water Year 1952-53

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.		
1.....	-	-	-	- b	22.37	19.82	18.97	77.96	197.5	197.5	180.3	128.6		
2.....	-	-	-	-					196.9	196.9	180.8	130.0		
3.....	-	-	-	-					195.0	196.9	181.4	130.2		
4.....	-	-	-	-					203.4	199.7	181.4	134.7		
5.....	-	-	-	-					204.2	199.7	180.8	135.6		
6.....	-	-	-	-	22.47	19.64	22.47	b	204.5	202.5	176.0	136.9		
7.....	-	-	-	-					203.7	200.6	175.4	136.3		
8.....	-	-	-	-					210.7	199.2	176.0	134.5		
9.....	-	-	-	-					116.0	208.7	196.9	178.2		
10.....	-	-	-	-					112.2	205.9	192.5	177.9	141.4	
11.....	-	-	-	-	18.92	19.64	30.56	181.4	205.6	189.7	177.6	142.5		
12.....	-	-	-	-					121.6	205.6	188.8	172.3	137.6	
13.....	-	-	-	35.33					131.3	205.6	188.5	166.6	135.8	
14.....	-	-	-	-					154.7	214.3	188.5	164.6	130.5	
15.....	-	-	-	-					178.4	220.2	183.0	163.8	128.4	
16.....	-	-	-	-	32.58	18.96	39.45	211.2	214.9	180.6	162.8	128.8		
17.....	-	-	-	-					182.2	217.1	175.7	160.3	130.5	
18.....	-	-	-	-					182.2	219.4	175.7	156.6	129.4	
19.....	-	-	-	-					179.8	215.1	178.2	156.4	128.8	
20.....	-	-	-	-					179.5	215.1	179.0	156.2	127.1	
21.....	-	-	-	-	18.78	18.74	39.45		210.1	180.3	150.4	124.2		
22.....	-	-	-	-					185.7	211.5	180.3	145.3	124.0	
23.....	-	-	-	-					188.5	211.8	180.0	142.5	120.8	
24.....	-	-	-	-					194.1	208.4	177.6	141.4	119.8	
25.....	-	-	-	-					205.1	205.6	177.1	139.6	119.0	
26.....	-	-	-	-	26.10	18.74	39.45		211.2	202.5	172.5	142.5	120.6	
27.....	-	-	-	-					216.5	202.0	170.2	139.6	120.2	
28.....	-	-	-	-					216.5	197.5	170.2	139.1	118.0	
29.....	-	-	-	-					210.9	196.9	169.7	136.9	120.8	
30.....	-	-	-	-					206.5	197.8	172.3	130.5	118.0	
31.....	-	-	-	-					205.6	-	175.4	130.0	-	
Mean	-	-	-	-	20,320e	19,190e	30,360e	151,000	206,900	185,000	160,100	129,000		
Per sq. mi.	-	-	-	-	0.09	0.08	0.13	0.65	0.88	0.79	0.68	0.55		
Acre-feet in 1,000	-	-	-	-	1,129	1,180	1,807	9,284	12,310	11,380	9,844	7,675		

The Period..... Discharge: Daily - Maximum 15 June, 220,200

(273 days) Mean 113,800; Per Square Mile 0.49

Runoff: Acre-feet 54,610,000; Depth in inches on drainage area 4.38

b - Ice conditions 1 January to 8 May.

e - Estimated.

Daily Discharge in 1,000 Cubic Feet per Second for Water Year 1953-54

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	117.5	87.98	47.29	54.69	35.86	24.12	19.79	61.99	248.7	286.4	226.0	211.5
2.....	120.8								256.5	283.4	225.5	208.1
3.....	117.1								258.4	282.4	228.9	205.1
4.....	118.2								256.8	280.2	227.5	204.2
5.....	120.4								254.3	277.6	229.2	203.7
6.....	117.1	60.46	46.20	57.12	31.39	21.13	20.59	129.3	254.6	279.2	227.8	200.3
7.....	117.9								260.7	278.6	226.9	197.8
8.....	117.9								257.1	279.9	225.2	195.8
9.....	116.5								254.3	279.2	224.3	196.9
10.....	116.5								264.5	280.2	223.1	200.9
11.....	123.0	49.24	47.97	49.52	27.34	19.18	26.26	204.2	275.1	278.2e	219.7	201.1
12.....	120.6								280.5	276.3e	219.1	201.7
13.....	116.9								278.3	274.3e	218.5	200.0
14.....	114.2								275.4	272.3e	217.7	198.1
15.....	113.7								270.9	270.4e	217.4	193.6
16.....	118.0	118.1	47.97	49.52	27.34	19.18	26.26	204.2	278.3	268.5e	213.5	190.8
17.....	123.0								279.9	266.5e	217.4	185.7
18.....	124.8								280.5	264.5	222.6	179.2
19.....	128.8								272.5	258.4	226.0	177.3
20.....	126.9								274.4	258.1	231.9	179.2
21.....	126.9	b	47.97	49.52	27.34	19.18	26.26	204.2	277.3	253.0	229.5	182.7
22.....	130.2								272.2	246.5	224.0	185.7
23.....	b								268.7	242.5	221.1	185.7
24.....	b								281.2	237.0	221.4	188.0
25.....	b								210.4	284.7	220.5	187.7
26.....	118.1	-	47.97	49.52	27.34	19.18	26.26	204.2	213.2	287.0	232.8	216.0
27.....	118.1								214.6	289.7	235.8	216.8
28.....	118.1								213.5	292.6	234.9	214.6
29.....	118.1								214.9	293.6	232.5	211.5
30.....	118.1								217.1	290.3	230.1	210.4
31.....	118.1								221.1	229.5	210.1	-
Mean	119,700	65,890e	47,180e	53,610e	31,830e	21,030e	22,210e	129,300e	272,300	261,300	221,400	192,300
Per sq. mi.	0.51	0.28	0.20	0.23	0.14	0.09	0.09	0.55	1.16	1.12	0.95	0.82
Acre-feet in 1,000	7,358	3,921	2,901	3,297	1,768	1,293	1,322	7,953	16,200	16,070	13,610	11,440

The Year..... Discharge: Daily - Maximum 29 June, 293,600

Mean 120,400; Per Square Mile 0.51

Runoff: Acre-feet 87,130,000; Depth in inches on drainage area 6.98

b - Ice conditions 23 October to 23 May.

e - Estimated.

Daily Discharge in 1,000 Cubic Feet per Second for Water Year 1954-55

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	178.7	165.6	-	-	-	-	-	-	182.5	260.7	206.2	169.2
2.....	177.1	161.0	-	-	-	-	-	-	181.4	257.8	209.5	164.6
3.....	176.5	161.6	-	-	-	-	-	-	183.6	255.6	213.2	157.6
4.....	174.6	161.0	-	-	-	-	-	-	186.3	254.9	216.8	156.4
5.....	177.6	160.8	-	-	-	-	-	-	186.9	250.3	216.8	156.4
6.....	178.2	158.1	-	-	-	-	-	-	204.2	253.0	216.5	155.2
7.....	181.4	155.7	-	-	-	-	-	-	220.5	255.9	216.5	154.7
8.....	181.4	154.2	-	-	-	-	-	-	215.7	252.1	215.7	150.9
9.....	180.8	153.5	-	-	-	-	-	-	217.9	248.4	211.2	146.0
10.....	177.6	148.0	-	-	-	-	-	-	218.2	245.3	213.2	145.8
11.....	177.1	- b	-	-	-	-	-	-	217.1	242.5	212.9	147.8
12.....	198.9	-	-	-	-	-	-	-	213.2	240.6	211.5	151.8
13.....	192.5	-	-	-	-	-	-	-	211.5	245.0	209.5	151.4
14.....	182.7	-	-	-	-	-	-	-	205.9	248.1	208.4	155.2
15.....	167.1	-	-	-	-	-	-	-	205.6	250.6	204.8	155.2
16.....	165.0	-	-	-	-	-	-	209.5	207.0	250.3	201.7	155.0
17.....	165.0	-	-	-	-	-	-	172.3	215.7	249.6	195.8	156.2
18.....	167.3	-	-	-	-	-	-	166.0	229.8	250.0	190.5	152.8
19.....	168.1	-	-	-	-	-	-	163.8	235.2	247.8	188.0	142.1
20.....	172.0	-	-	-	-	-	-	160.6	235.2	243.4	187.7	138.2
21.....	170.5	-	-	-	-	-	-	160.8	232.8	237.3	183.6	139.8
22.....	169.9	-	-	-	-	-	-	163.8	237.0	232.2	181.9	139.3
23.....	172.0	-	-	-	-	-	-	166.3	237.3	226.0	178.2	138.0
24.....	170.5	-	-	-	-	-	-	168.9	237.0	221.1	177.1	135.2
25.....	164.8	-	-	-	-	-	-	178.2	233.7	224.6	176.5	132.4
26.....	164.6	-	-	-	-	-	-	183.6	231.6	222.8	175.2	132.1
27.....	165.3	-	-	-	-	-	-	190.8	228.9	221.1	171.2	131.5
28.....	169.4	-	-	-	-	-	-	190.8	226.3	213.2	171.0	131.5
29.....	168.4	-	-	-	-	-	-	191.3	230.4	211.2	174.1	131.1
30.....	168.1	-	-	-	-	-	-	186.9	238.2	208.4	173.3	130.9
31.....	169.2	-	-	-	-	-	-	183.6	-	206.5	171.2	-
Mean	173,900	-	-	-	-	-	-	-	216,900	239,600	196,100	146,800
Per sq. mi.	0.74	-	-	-	-	-	-	-	0.93	1.02	0.84	0.63
Acre-feet in 1,000	10,700	-	-	-	-	-	-	-	12,910	14,730	12,060	8,736

The Period..... Discharge: Daily - Maximum 1 July, 260,700
(153 days) Mean 194,800; Per Square Mile 0.83

Runoff: Acre-feet 59,140,000; Depth in inches on drainage area 4.74

b - Ice conditions.

Daily Discharge in 1,000 Cubic Feet per Second for Water Year 1955-56

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	130.5	-	-	-	-	-	-	-	194.7	221.4	177.6	136.0
2.....	130.0	-	-	-	-	-	-	-	202.8	219.7	176.3	136.0
3.....	129.6	-	-	-	-	-	-	-	202.3	216.8	175.2	151.6
4.....	128.6	-	-	-	-	-	-	-	199.2	213.5	178.4	144.1
5.....	128.2	-	-	-	-	-	-	-	196.7	209.8	176.9e	138.7
6.....	127.5	-	-	-	-	-	-	-	195.8	207.9	175.4e	136.7
7.....	125.8	-	-	-	-	-	-	-	188.0	207.3	173.9e	136.7
8.....	125.2	-	-	-	-	-	-	-	185.2	204.8	172.4e	136.7
9.....	127.7	-	-	-	-	-	-	-	194.4	205.6	170.8e	137.4
10.....	127.9	-	-	-	-	-	-	-	199.5	207.6	169.3e	134.7
11.....	128.2	-	-	-	-	-	-	- b	210.1	208.7	167.8e	135.2
12.....	128.6	-	-	-	-	-	-	149.0	210.7	208.4	166.3	143.4
13.....	128.2	-	-	-	-	-	-	121.8	211.5	207.3	166.8	139.8
14.....	123.0	-	-	-	-	-	-	116.2	214.9	208.4	166.0	139.3
15.....	121.6	-	-	-	-	-	-	117.3	221.7	209.5	165.0	136.0
16.....	123.2	-	-	-	-	-	-	119.8	219.1	205.9	162.8	134.7
17.....	122.8	-	-	-	-	-	-	128.4	223.7	203.1	159.3	135.4
18.....	123.4	-	-	-	-	-	-	143.7	221.1	198.1	157.1	134.9
19.....	122.6	-	-	-	-	-	-	152.3	226.0	196.7	155.2	134.3
20.....	122.8	-	-	-	-	-	-	161.6	228.1	197.5	155.0	134.5
21.....	122.4	-	-	-	26.89b	-	-	163.0	223.4	196.9	152.6	134.7
22.....	112.9	-	-	-	-	-	-	165.0	223.1	194.4	147.4	133.4
23.....	118.8	-	-	-	-	-	-	165.6	224.9	188.8	146.7	133.0
24.....	124.4	-	-	-	-	-	-	169.2	222.8	192.7	146.7	120.2
25.....	122.8	-	-	-	-	-	-	180.8	223.7	192.2	146.0	119.8
26.....	125.6	-	-	-	-	-	-	194.1	220.2	190.2	145.5	125.8
27.....	126.5	-	-	-	-	-	-	195.0	221.7	186.0	148.0	126.3
28.....	125.0	-	-	-	-	-	-	195.8	223.1	186.0	146.4	110.7
29.....	123.4	-	-	-	-	-	-	196.7	223.4	187.7	141.4	120.2
30.....	121.0	-	-	-	-	-	-	197.8	222.8	180.8	136.7	120.0e
31.....	124.8	-	-	-	-	-	-	195.0	-	178.2	134.7	-
Mean	124,900	-	-	-	-	-	-	-	212,500	201,000	160,000	133,300
Per sq. mi.	0.53	-	-	-	-	-	-	-	0.91	0.86	0.68	0.57
Acre-feet in 1,000	7,682	-	-	-	-	-	-	-	12,640	12,360	9,837	7,934

The Period..... Discharge: Daily - Maximum 20 June, 228,100

(153 days)

Mean 166,300; Per Square Mile 0.71

Runoff: Acre-feet 50,450,000; Depth in inches on drainage area 4.04

b - Ice conditions.

e - Estimated.

Daily Discharge in 1,000 Cubic Feet per Second for Water Year 1956-57

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	115.0e	-	-	-	-	-	-	160.0	230.7	203.9	205.3	218.2
2.....		-	-	-	-	-	-		225.5	202.5	208.7	221.1
3.....		-	-	-	-	-	-		230.7	204.8	205.6	218.2
4.....		-	-	-	-	-	-		228.4	200.0	203.9	214.0
5.....		-	-	-	-	-	-		222.8	197.8	200.6	210.7
6.....	110.3	-	-	-	-	-	-	b	215.4	198.3	194.1	205.1
7.....		-	-	-	-	-	-		216.3	199.7	195.5	194.1
8.....		-	-	-	-	-	-		215.7	202.5	196.1	185.7
9.....		-	-	-	-	-	-		215.1	205.9	197.8	175.4
10.....		-	-	-	-	-	-		217.1	205.3	200.6	179.0
11.....	118.8	-	-	-	-	-	-	195.8	222.6	201.1	201.4	180.8
12.....	119.2	-	-	-	-	-	-	198.6	228.1	202.3	196.9	177.3
13.....	116.9	-	-	-	-	-	-	203.9	228.4	201.4	197.2	174.9
14.....	116.5	-	-	-	-	-	-	202.3	227.2	200.3	194.7	172.0
15.....	117.7	-	-	-	-	-	-	195.8	227.8	198.6	193.0	173.6
16.....	118.8	-	-	-	-	-	-	195.5	226.0	197.2	193.0	173.3
17.....	119.6	-	-	-	-	-	-	198.9	222.6	196.4	214.0	172.0
18.....	122.0	-	-	-	-	-	-	199.5	224.0	194.4	229.5	168.4
19.....	118.8	-	-	-	28.57	-	-	195.8	224.6	191.9	234.0	171.5
20.....	121.4	-	-	-	-	-	-	195.5	225.5	188.8	237.0	172.3
21.....	115.4	-	-	-	-	-	-	196.1	225.2	189.9	232.8	167.3
22.....	117.5	-	-	-	-	-	-	192.5	223.7	189.4	232.2	165.3
23.....	126.3	-	-	-	-	-	-	192.2	224.9	192.2	231.0	161.8
24.....	116.0	-	-	-	-	-	-	200.0	213.5	195.3	234.0	159.6
25.....	- b	-	-	-	-	-	-	205.6	210.4	197.2	225.8	159.6
26.....	-	-	-	-	-	-	-	215.4	211.5	210.9	219.4	156.2
27.....	-	-	-	-	-	-	-	219.4	209.8	214.3	212.1	155.7
28.....	-	-	-	-	-	-	-	220.8	207.6	209.0	205.3	151.8
29.....	-	-	-	-	-	-	-	224.6	205.9	203.1	202.5	151.6
30.....	-	-	-	-	-	-	-	224.0	203.9	204.2	197.2	149.4
31.....	-	-	-	-	-	-	-	228.1	-	204.5	205.3	-
Mean	-	-	-	-	-	-	-	190,300	220,400	200,100	209,600	177,900
Per sq. mi.	-	-	-	-	-	-	-	0.81	0.94	0.86	0.90	0.76
Acre-feet in 1,000	-	-	-	-	-	-	-	11,700	13,110	12,300	12,890	10,580

The Period..... Discharge: Daily - Maximum 20 August, 237,000
(153 days)

Mean 199,700; Per Square Mile 0.85

Runoff: Acre-feet 60,580,000; Depth in inches on drainage area 4.85

b - Ice conditions 25 October to 10 May.

e - Estimated.

Daily Discharge in 1,000 Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	146.0	-	-	-	-	-	-	-	-	219.4	161.6	130.0
2.....	144.1	-	-	-	-	-	-	-	-	219.4	153.8	129.6
3.....	148.5	-	-	-	-	-	-	-	-	219.4	153.5	129.0
4.....	146.7	-	-	-	-	-	-	-	-	219.1	155.9	128.6
5.....	165.6	-	-	-	-	-	-	-	-	219.8	155.9	130.2
6.....	158.8	-	-	-	-	-	-	-	-	219.8	155.9	129.2
7.....	146.4	-	-	-	-	218.5	-	-	-	218.5	156.4	128.4
8.....	137.1	-	-	-	-	-	-	-	-	218.5	154.2	127.1
9.....	136.0	-	-	-	-	-	-	-	-	217.7	153.8	126.0
10.....	133.8	-	-	-	-	-	-	-	-	217.4	153.5	124.4
11.....	136.0	-	-	-	-	-	-	-	251.2	218.2	152.1	124.0
12.....	138.2	-	-	-	-	-	-	-	-	216.5	151.4	126.0
13.....	138.7	-	-	-	-	-	-	-	-	213.2	151.4	131.1
14.....	136.7	-	-	-	-	-	-	-	-	208.1	150.6	138.9
15.....	136.0	-	-	-	-	-	-	-	249.0	209.3	148.7	134.9
16.....	134.5	-	-	-	-	-	-	-	249.0	201.1	145.3	125.0
17.....	133.4	-	-	-	-	-	-	-	249.6	195.3	140.0	123.0
18.....	131.3	-	-	-	-	-	-	-	255.2	195.3	139.3	120.8
19.....	132.4	-	-	-	-	-	-	-	268.0	193.6	141.2	120.0
20.....	130.2	-	-	-	-	-	-	-	264.8	184.4	139.8	120.4
21.....	136.3	-	-	-	-	-	-	-	264.8	181.7	141.2	121.0
22.....	136.5	-	-	-	-	-	-	-	261.6	176.5	141.2	122.0
23.....	132.4	-	-	-	-	-	-	-	258.4	174.4	139.6	120.0
24.....	130.9	-	-	-	-	-	-	-	258.4	174.4	138.9	120.0
25.....	131.1	-	-	-	-	-	-	-	225.2	173.8	137.6	119.4
26.....	132.4	-	-	-	-	-	-	-	222.0	173.6	136.7	119.0
27.....	132.8	-	-	-	-	-	-	-	219.4	173.6	136.7	118.0
28.....	131.9	-	-	-	-	-	-	-	219.1	168.4	135.6	118.0
29.....	128.2	-	-	-	-	-	-	-	219.1	166.8	135.6	120.0
30.....	126.3	-	-	-	-	-	-	-	217.1	163.6	132.4	120.4
31.....	124.4	-	-	-	-	-	-	-	-	163.3	130.1	-
Mean	137,200	-	-	-	-	-	-	-	-	197,200	145,800	124,800
Per sq. mi.	0.59	-	-	-	-	-	-	-	-	0.84	0.62	0.53
Acre-feet in 1,000	8,437	-	-	-	-	-	-	-	-	12,130	8,965	7,427

The Period..... Discharge: Daily - Maximum 19 June, 268,000
(123 days) Mean 151,500; Per Square Mile 0.65
Runoff: Acre-feet 36,960,000; Depth in inches on drainage area 2.96

Location: Lat. 60° 02', long. 112° 07', Northwest Territories, on landing dock at Bell Rock, ten miles north of Fort Smith. Gauge: Staff. Period of Record: Gauge heights only during open water, 1948 to date. Extremes Recorded: Daily - Maximum, 29 June 1954, 26.91 feet, Minimum, 5 October 1951, 11.90 feet. Remarks: This station was established when Station No. 7NB₂, Slave River at Fort Smith, was abandoned. Gauge heights are referred to bolt head on top of spruce stump about one hundred and fifty feet south of Northern Transportation Company office, gauge height 35.80 feet.

Daily Gauge Heights in Feet for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	-	-	-	-	-	14.73	-	-	-
2.....	-	-	-	-	-	24.38	21.32	17.34	14.90	-	-	-
3.....	-	-	-	-	-	24.38	21.09	-	14.86	-	-	-
4.....	-	-	-	-	-	24.70	21.02	17.40	14.77	-	-	-
5.....	-	-	-	-	-	25.03	21.05	17.46	14.92	-	-	-
6.....	-	-	-	-	-	25.20	-	17.24	14.64	-	-	-
7.....	-	-	-	-	-	24.96	21.82	17.18	-	-	-	-
8.....	-	-	-	-	-	-	21.86	17.06	14.64	-	-	-
9.....	-	-	-	-	-	24.76	21.90	16.79	14.65	-	-	-
10.....	-	-	-	-	-	24.63	21.71	-	14.67	-	-	-
11.....	-	-	-	-	-	24.58	21.50	16.66	14.62	-	-	-
12.....	-	-	-	-	-	-	21.40	16.57	14.62	-	-	-
13.....	-	-	-	-	20.60	-	-	16.44	14.69	-	-	-
14.....	-	-	-	-	21.13	-	20.91	16.41	-	-	-	-
15.....	-	-	-	-	21.26	-	20.70	16.53	15.54	-	-	-
16.....	-	-	-	-	21.38	24.39	20.42	16.32	15.19	-	-	-
17.....	-	-	-	-	21.28	24.23	20.22	-	14.64	-	-	-
18.....	-	-	-	-	-	24.06	20.03	15.89	14.54	-	-	-
19.....	-	-	-	-	21.38	23.85	19.95	15.70	14.47	-	-	-
20.....	-	-	-	-	21.40	23.53	-	15.72	14.39	-	-	-
21.....	-	-	-	-	21.56	23.29	19.56	15.86	-	-	-	-
22.....	-	-	-	-	21.50	-	19.50	16.00	-	-	-	-
23.....	-	-	-	-	21.40	22.88	19.23	15.84	-	-	-	-
24.....	-	-	-	-	21.38	22.76	18.86	-	-	-	-	-
25.....	-	-	-	-	-	22.58	18.76	-	-	-	-	-
26.....	-	-	-	-	21.62	22.32	18.75	-	-	-	-	-
27.....	-	-	-	-	21.60	22.20	-	-	-	-	-	-
28.....	-	-	-	-	22.03	22.08	18.42	-	-	-	-	-
29.....	-	-	-	-	23.00	21.88	18.16	-	-	-	-	-
30.....	-	-	-	-	23.40	21.64	18.03	-	-	-	-	-
31.....	-	-	-	-	23.93	-	-	-	-	-	-	-

GREAT SLAVE LAKE AT RESOLUTION - STATION No. 7PB₁

Location: Lat. 61° 10', long. 113° 42', Northwest Territories. Gauge: Staff. Period of Record: Mainly open water 1934, 1935, 1938 to 1955 and 1957 to date. Extremes Recorded: Daily - Maximum, 24 July 1954, 6.50 feet, Minimum, 17 and 18 May 1946, 2.80 feet. Remarks: Elevations are referred to brass cap in Dominion Observatory monument, elevation 539.38 feet (approximate mean sea level datum). Prior to 1957, add 521.58 to convert gauge heights to present datum. Extreme stage of 24 July 1954 was the result of northwest wind at 36 m.p.h. Daily elevations for years 1950 to 1955 are included in this paper.

Daily Gauge Heights in Feet for Calendar Years 1950 and 1951

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1950												
1.....	-	-	-	-	-	4.48	4.90	5.05	4.80	4.45	-	-
2.....	-	-	-	-	-	4.50	4.90	5.10	4.70	4.50	-	-
3.....	-	-	-	-	-	4.52	4.92	5.12	4.70	4.48	-	-
4.....	-	-	-	-	-	4.52	4.90	5.10	4.90	4.30	-	-
5.....	-	-	-	-	-	4.55	4.90	4.95	4.80	4.15	-	-
6.....	-	-	-	-	-	4.58	4.90	5.00	4.60	4.35	-	-
7.....	-	-	-	-	-	4.60	4.92	5.00	4.80	4.20	-	-
8.....	-	-	-	-	-	4.55	5.10	5.05	4.75	4.30	-	-
9.....	-	-	-	-	-	4.60	4.80	5.00	4.75	4.20	-	-
10.....	-	-	-	-	-	4.62	5.03	4.95	4.60	4.05	-	-
11.....	-	-	-	-	-	4.58	4.92	4.92	4.60	4.30	-	-
12.....	-	-	-	-	3.90	4.64	4.95	4.98	4.62	4.20	-	-
13.....	-	-	-	-	3.95	4.70	4.95	5.00	4.74	4.20	-	-
14.....	-	-	-	-	4.05	4.60	4.96	4.90	4.52	4.05	-	-
15.....	-	-	-	-	4.10	4.60	4.98	5.02	4.45	4.04	-	-
16.....	-	-	-	-	4.10	4.70	5.00	4.85	4.70	4.20	-	-
17.....	-	-	-	-	4.15	4.60	5.00	4.85	4.60	4.10	-	-
18.....	-	-	-	-	4.20	4.70	5.00	4.90	4.54	4.10	-	-
19.....	-	-	-	-	4.20	4.75	5.00	4.95	4.60	4.18	-	-
20.....	-	-	-	-	4.20	4.65	4.98	4.98	4.60	4.20	-	-
21.....	-	-	-	-	4.24	4.70	4.96	4.80	4.75	4.00	-	-
22.....	-	-	-	-	4.24	4.70	4.90	4.76	4.30	-	-	-
23.....	-	-	-	-	4.24	4.72	4.95	4.70	4.40	-	-	-
24.....	-	-	-	-	4.26	4.72	4.94	4.60	4.50	-	-	-
25.....	-	-	-	-	4.30	4.80	4.96	4.60	4.50	-	-	-
26.....	-	-	-	-	4.32	4.80	5.00	4.75	4.50	-	-	-
27.....	-	-	-	-	4.40	4.80	4.95	4.60	4.50	-	-	-
28.....	-	-	-	-	4.40	4.80	4.95	4.75	4.50	-	-	-
29.....	-	-	-	-	4.40	4.80	4.98	4.75	4.45	-	-	-
30.....	-	-	-	-	4.44	4.85	4.96	4.80	4.50	-	-	-
31.....	-	-	-	-	4.48	-	5.10	4.75	-	-	-	-
1951												
1.....	-	-	-	-	-	4.54	5.30	5.55	-	4.95	-	-
2.....	-	-	-	-	-	4.63	5.40	5.40	5.44	4.96	-	-
3.....	-	-	-	-	-	4.70	5.32	5.40	5.35	4.80	-	-
4.....	-	-	-	-	-	4.75	5.30	5.45	5.40	4.95	-	-
5.....	-	-	-	-	-	4.80	5.40	5.55	5.30	4.80	-	-
6.....	-	-	-	-	-	4.80	5.42	5.65	5.30	4.95	-	-
7.....	-	-	-	-	-	4.80	5.42	5.50	5.35	4.55	-	-
8.....	-	-	-	-	-	4.84	5.40	5.50	5.32	4.70	-	-
9.....	-	-	-	-	-	4.90	5.50	5.48	5.30	4.95	-	-
10.....	-	-	-	-	-	4.95	5.45	5.45	5.40	4.70	-	-
11.....	-	-	-	-	-	4.95	5.45	5.45	5.40	4.35	-	-
12.....	-	-	-	-	3.70	4.85	5.50	5.50	5.30	4.75	-	-
13.....	-	-	-	-	3.70	5.15	5.45	5.45	5.40	4.85	-	-
14.....	-	-	-	-	3.75	5.00	5.40	5.45	5.28	4.75	-	-
15.....	-	-	-	-	3.80	5.05	5.42	5.42	5.22	4.80	-	-
16.....	-	-	-	-	3.90	5.20	5.45	5.45	5.22	-	-	-
17.....	-	-	-	-	4.05	5.10	5.40	5.45	5.25	-	-	-
18.....	-	-	-	-	4.00	5.10	5.40	5.45	4.90	-	-	-
19.....	-	-	-	-	4.08	5.10	5.45	5.50	5.20	-	-	-
20.....	-	-	-	-	4.10	5.10	5.40	5.40	5.20	-	-	-
21.....	-	-	-	-	4.20	5.15	5.48	5.40	5.25	-	-	-
22.....	-	-	-	-	4.20	5.15	5.50	5.70	5.22	-	-	-
23.....	-	-	-	-	4.21	5.20	5.42	5.60	5.20	-	-	-
24.....	-	-	-	-	4.30	5.14	5.65	5.45	5.20	-	-	-
25.....	-	-	-	-	4.40	5.50	5.60	5.55	5.10	-	-	-
26.....	-	-	-	-	4.43	5.45	5.55	-	5.14	-	-	-
27.....	-	-	-	-	4.50	5.40	5.50	-	5.20	-	-	-
28.....	-	-	-	-	4.50	5.35	5.42	-	4.90	-	-	-
29.....	-	-	-	-	4.52	5.45	5.45	-	4.90	-	-	-
30.....	-	-	-	-	4.54	5.40	5.50	-	4.98	-	-	-
31.....	-	-	-	-	4.54	-	5.55	-	-	-	-	-

Daily Gauge Heights in Feet for Calendar Years 1952 and 1953

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1952												
1.....	-	-	-	-	- b	4.25	4.65	5.10	5.05	4.50	4.00	-
2.....	-	-	-	-	-	4.25	4.75	5.15	5.00	4.50	-	-
3.....	-	-	-	-	-	4.40	4.90	5.10	4.80	5.10	-	-
4.....	-	-	-	-	-	4.25	4.90	5.10	4.90	4.40	-	-
5.....	-	-	-	-	-	4.30	4.80	5.05	4.80	4.20	-	-
6.....	-	-	-	-	-	4.32	4.78	5.20	4.70	4.40	-	-
7.....	-	-	-	-	-	4.35	4.55	5.05	4.90	4.40	-	-
8.....	-	-	-	-	-	4.42	4.75	5.00	4.90	4.40	-	-
9.....	-	-	-	-	-	4.32	4.54	5.00	4.80	4.35	-	-
10.....	-	-	-	-	-	4.40	4.90	5.05	4.80	4.35	-	-
11.....	-	-	-	-	-	4.40	4.84	5.00	4.90	4.35	-	-
12.....	-	-	-	-	3.90	4.40	4.80	5.10	4.75	4.40	-	-
13.....	-	-	-	-	3.90	4.40	4.80	5.15	5.20	4.40	-	-
14.....	-	-	-	-	3.90b	4.50	4.90	5.00	4.80	4.30	-	-
15.....	-	-	-	-	3.90	4.50	4.90	5.10	5.00	4.10	-	-
16.....	-	-	-	-	3.90	4.40	4.94	5.05	5.10	4.20	-	-
17.....	-	-	-	-	4.00	4.50	4.90	4.95	4.80	4.10	-	-
18.....	-	-	-	-	4.02	4.50	5.02	4.90	4.65	4.20	-	-
19.....	-	-	-	-	3.90	4.40	4.95	4.90	4.65	4.25	-	-
20.....	-	-	-	-	3.92	4.50	5.00	5.00	4.75	4.25	-	-
21.....	-	-	-	-	3.70	4.46	5.02	4.98	4.60	4.40	-	-
22.....	-	-	-	-	4.00	4.40	5.00	4.92	4.60	4.40	-	-
23.....	-	-	-	-	4.02	4.50	4.95	4.90	4.52	4.10	-	-
24.....	-	-	-	-	4.06	4.55	5.02	4.95	4.65	4.15	-	-
25.....	-	-	-	-	4.10	4.60	4.95	4.90	4.30	4.60	-	-
26.....	-	-	-	-	4.14	4.55	5.10	4.98	4.55	4.35	-	-
27.....	-	-	-	-	4.02	4.55	5.10	5.20	4.50	3.95	-	-
28.....	-	-	-	-	4.20	4.60	5.20	5.00	4.55	4.30	-	-
29.....	-	-	-	-	4.15	4.60	5.05	5.10	4.50	3.80	-	-
30.....	-	-	-	-	4.12	4.65	5.00	5.08	4.60	3.95	-	-
31.....	-	-	-	-	4.20	-	4.95	5.00	-	4.20	-	-
1953												
1.....	-	-	-	-	-	3.42	4.05	4.20	4.60	4.20	-	-
2.....	-	-	-	-	-	3.44	4.20	4.20	4.50	4.20	-	-
3.....	-	-	-	-	-	3.50	4.15	4.20	4.50	4.20	-	-
4.....	-	-	-	-	-	3.45	4.20	4.20	4.55	4.55	-	-
5.....	-	-	-	-	-	3.44	4.10	4.20	4.25	4.60	-	-
6.....	-	-	-	-	-	3.56	4.10	4.35	4.25	4.25	-	-
7.....	-	-	-	-	-	3.60	4.00	4.35	4.45	4.00	-	-
8.....	-	-	-	-	-	3.55	4.20	4.40	4.45	4.25	-	-
9.....	-	-	-	-	-	3.50	4.25	4.56	4.25	4.20	-	-
10.....	-	-	-	-	-	3.60	4.10	4.45	4.44	3.90	-	-
11.....	-	-	-	-	-	3.60	4.20	4.45	4.40	4.00	-	-
12.....	-	-	-	-	-	3.70	4.10	4.40	4.40	4.10	-	-
13.....	-	-	-	-	-	3.70	4.20	4.55	4.30	4.40	-	-
14.....	-	-	-	-	-	3.60	4.20	4.45	4.45	4.25	-	-
15.....	-	-	-	-	-	3.70	4.25	4.35	4.45	4.15	-	-
16.....	-	-	-	-	2.95	3.70	4.20	4.30	4.45	4.05	-	-
17.....	-	-	-	-	2.95	3.70	4.20	4.80	4.40	4.10	-	-
18.....	-	-	-	-	3.00	3.80	4.25	4.50	4.35	4.05	-	-
19.....	-	-	-	-	3.00	3.75	4.25	4.40	4.32	4.05	-	-
20.....	-	-	-	-	3.02	3.80	4.25	4.40	4.42	4.20	-	-
21.....	-	-	-	-	3.04	3.75	4.25	4.80	4.30	4.15	-	-
22.....	-	-	-	-	3.10	3.80	4.25	4.60	4.30	4.05	-	-
23.....	-	-	-	-	3.15	3.90	4.25	4.55	4.30	4.15	-	-
24.....	-	-	-	-	3.16	3.95	4.20	4.55	4.40	4.50	-	-
25.....	-	-	-	-	3.16	4.00	4.20	4.45	4.30	4.40	-	-
26.....	-	-	-	-	3.16	3.95	4.25	4.45	4.30	4.00	-	-
27.....	-	-	-	-	3.19	4.15	4.30	4.45	4.30	4.50	-	-
28.....	-	-	-	-	3.22	4.00	4.30	4.40	4.32	4.00	-	-
29.....	-	-	-	-	3.28	3.90	4.40	4.30	4.60	3.98	-	-
30.....	-	-	-	-	3.40	3.95	4.30	4.50	4.40	-	-	-
31.....	-	-	-	-	3.40	-	4.30	4.80	-	-	-	-

b - Ice conditions 1 to 14 May 1952.

Daily Gauge Heights in Feet for Calendar Years 1954 and 1955

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1954												
1.....	-	-	-	-	-	3.80	4.84	5.60	5.58	5.50	-	-
2.....	-	-	-	-	-	3.85	4.86	5.60	5.70	5.50	-	-
3.....	-	-	-	-	-	3.90	4.90	5.56	5.65	5.60	-	-
4.....	-	-	-	-	-	3.90	4.95	5.58	5.60	5.60	-	-
5.....	-	-	-	-	-	3.95	4.96	5.58	5.60	5.00	-	-
6.....	-	-	-	-	-	4.00	4.98	5.55	5.60	5.30	-	-
7.....	-	-	-	-	-	4.05	5.00	5.60	5.60	5.20	-	-
8.....	-	-	-	-	-	4.10	5.00	5.60	5.60	5.30	-	-
9.....	-	-	-	-	-	4.20	5.05	5.60	5.50	5.30	-	-
10.....	-	-	-	-	-	4.10	5.60	5.60	5.40	5.30	-	-
11.....	-	-	-	-	-	4.20	5.20	5.65	5.50	5.35	-	-
12.....	-	-	-	-	-	4.22	5.16	5.66	5.50	5.35	-	-
13.....	-	-	-	-	-	4.20	5.25	5.60	5.45	5.35	-	-
14.....	-	-	-	-	-	4.25	5.25	5.50	5.90	5.10	-	-
15.....	-	-	-	-	-	4.35	5.22	5.60	5.70	5.40	-	-
16.....	-	-	-	-	3.00	4.45	5.30	5.55	5.60	5.10	-	-
17.....	-	-	-	-	3.20	4.50	5.32	5.55	5.40	5.30	-	-
18.....	-	-	-	-	3.20	4.52	5.40	5.60	5.55	5.20	-	-
19.....	-	-	-	-	3.28	4.55	5.30	5.65	6.10	5.10	-	-
20.....	-	-	-	-	3.28	4.56	5.32	5.60	5.70	5.30	-	-
21.....	-	-	-	-	3.30	4.56	5.40	5.70	5.30	5.20	-	-
22.....	-	-	-	-	3.30	4.58	5.40	5.90	5.40	5.10	-	-
23.....	-	-	-	-	3.45	4.70	5.80	5.70	5.90	5.00	-	-
24.....	-	-	-	-	3.48	4.60	6.50	5.60	5.40	5.05	-	-
25.....	-	-	-	-	3.55	4.65	5.80	5.66	5.45	5.40	-	-
26.....	-	-	-	-	3.60	4.70	5.70	5.68	5.40	5.00	-	-
27.....	-	-	-	-	3.62	4.70	5.65	5.60	5.40	5.25	-	-
28.....	-	-	-	-	3.65	4.75	5.60	5.60	5.70	5.20	-	-
29.....	-	-	-	-	3.20	4.80	5.58	5.65	5.55	5.10	-	-
30.....	-	-	-	-	3.72	4.76	5.52	5.70	5.45	5.00	-	-
31.....	-	-	-	-	3.76	-	5.58	5.60	-	4.92	-	-
1955												
1.....	-	-	-	-	-	5.10	5.20	5.50	5.63	5.10	4.43	-
2.....	-	-	-	-	-	5.00	5.28	5.60	5.85	4.84	-	-
3.....	-	-	-	-	-	5.09	5.26	5.70	5.60	4.80	-	-
4.....	-	-	-	-	-	5.09	5.24	5.64	5.54	4.70	-	-
5.....	-	-	-	-	-	5.16	5.34	5.71	5.59	4.80	-	-
6.....	-	-	-	-	-	5.12	5.30	5.60	5.53	4.89	-	-
7.....	-	-	-	-	-	5.13	5.28	5.70	5.41	4.78	-	-
8.....	-	-	-	-	-	5.15	5.27	5.68	5.45	4.84	-	-
9.....	-	-	-	-	-	5.15	5.28	5.60	5.90	4.67	-	-
10.....	-	-	-	-	-	5.13	5.29	5.50	5.40	4.55	-	-
11.....	-	-	-	-	-	5.13	5.32	5.70	5.15	4.79	-	-
12.....	-	-	-	-	-	5.15	5.35	5.70	5.05	4.64	-	-
13.....	-	-	-	-	-	5.10	5.40	5.75	5.18	4.75	-	-
14.....	-	-	-	-	-	5.20	5.45	5.55	5.01	4.90	-	-
15.....	-	-	-	-	4.85	5.19	5.47	5.65	5.15	4.80	-	-
16.....	-	-	-	-	4.86	5.18	5.43	5.75	5.17	4.70	-	-
17.....	-	-	-	-	4.91	5.10	5.41	5.60	5.19	4.74	-	-
18.....	-	-	-	-	4.91	5.19	5.41	5.70	5.08	4.78	-	-
19.....	-	-	-	-	4.97	5.20	5.47	5.73	5.24	4.68	-	-
20.....	-	-	-	-	4.94	5.26	5.50	5.54	5.29	4.58	-	-
21.....	-	-	-	-	5.05	5.18	5.56	5.54	5.15	4.57	-	-
22.....	-	-	-	-	5.06	5.19	5.65	5.50	5.07	4.30	-	-
23.....	-	-	-	-	5.06	5.20	5.58	5.56	5.03	4.25	-	-
24.....	-	-	-	-	5.07	5.18	5.45	5.68	5.01	4.60	-	-
25.....	-	-	-	-	5.06	5.21	5.52	5.50	5.01	4.80	-	-
26.....	-	-	-	-	5.08	5.27	5.50	5.50	5.18	4.52	-	-
27.....	-	-	-	-	5.08	5.21	5.71	5.65	5.14	4.60	-	-
28.....	-	-	-	-	5.08	5.27	5.68	5.58	5.08	4.55	-	-
29.....	-	-	-	-	5.08	5.27	5.64	5.55	5.04	4.53	-	-
30.....	-	-	-	-	5.09	5.33	5.63	5.50	4.99	4.43	-	-
31.....	-	-	-	-	5.10	-	5.60	5.55	-	4.42	-	-

Daily Elevations in Feet for Calendar Year 1958

Day	Jan.	Feb.	March.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	-	-	526.78	527.08	527.38	526.74	526.16	-	-
2.....	-	-	-	-	-	526.78	527.08	527.38	526.74	526.12	-	-
3.....	-	-	-	-	-	526.78	527.08	526.98	526.73	526.10	-	-
4.....	-	-	-	-	-	526.78	527.08	526.98	526.73	526.08	-	-
5.....	-	-	-	-	-	526.78	527.08	526.98	526.73	526.08	-	-
6.....	-	-	-	-	-	526.78	526.88	527.08	526.73	526.06	-	-
7.....	-	-	-	-	-	526.78	526.88	527.08	526.74	526.03	-	-
8.....	-	-	-	-	-	726.78	526.98	527.08	526.74	526.02	-	-
9.....	-	-	-	-	-	526.78	526.98	527.08	526.74	526.02	-	-
10.....	-	-	-	-	-	526.78	526.98	526.85	526.75	526.02	-	-
11.....	-	-	-	-	-	526.78	526.98	526.85	526.75	526.02	-	-
12.....	-	-	-	-	-	526.78	526.98	526.85	526.75	526.03	-	-
13.....	-	-	-	-	-	526.78	526.98	526.85	526.75	526.03	-	-
14.....	-	-	-	-	-	526.78	526.98	526.84	526.75	526.03	-	-
15.....	-	-	-	-	-	526.78	526.98	526.84	526.75	526.03	-	-
16.....	-	-	-	-	-	526.78	527.08	526.83	526.76	526.03	-	-
17.....	-	-	-	-	-	526.78	527.08	526.62	526.77	526.03	-	-
18.....	-	-	-	-	526.58	526.78	527.08	526.62	526.77	526.03	-	-
19.....	-	-	-	-	526.58	526.78	527.08	526.82	526.77	525.98	-	-
20.....	-	-	-	-	526.58	526.78	526.88	526.63	526.77	525.93	-	-
21.....	-	-	-	-	526.58	526.78	526.88	526.63	526.58	525.90	-	-
22.....	-	-	-	-	526.58	526.78	526.98	526.63	526.54	525.88	-	-
23.....	-	-	-	-	526.58	526.78	526.98	526.63	526.52	525.86	-	-
24.....	-	-	-	-	526.58	526.78	526.98	526.63	526.50	525.86	-	-
25.....	-	-	-	-	-	526.78	526.98	526.63	526.48	525.86	-	-
26.....	-	-	-	-	526.68	526.88	526.98	526.64	526.43	525.85	-	-
27.....	-	-	-	-	526.68	526.88	526.98	526.64	526.42	525.84	-	-
28.....	-	-	-	-	526.68	526.98	526.98	526.64	526.38	525.83	-	-
29.....	-	-	-	-	526.78	527.08	526.98	526.64	526.33	525.82	-	-
30.....	-	-	-	-	526.78	527.08	526.98	526.64	526.23	-	-	-
31.....	-	-	-	-	526.78	-	527.38	-	-	-	-	-

Location: Lat, 62° 26' 30", long, 114° 21' 00" (corrected), Northwest Territories, at Consolidated Mining and Smelting Company dock, Gauge: Staff. Period of Record: Periods of varying length, June 1938 to date. Extremes Recorded: Daily - Maximum, 30 August and 26 September 1948, 494.71 feet, Minimum, 5 and 28 April 1946, 491.49 feet. Remarks: Records supplied by Consolidated Mining and Smelting Company. The elevations are referenced to the Company's mine bench mark on rock near dock, elevation 496.91 feet (approximate elevation above sea level). Bench mark is at elevation 5,496.91 feet, Consolidated Mining and Smelting Company mine datum.

Daily Elevations in Feet for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	494.39	-	493.39	493.30	493.28	493.16	493.16	493.18	493.98	494.34	494.21	493.81
2.....	494.39	-	493.36	493.20	493.23	493.26	493.12	493.18	493.96	494.33	494.23	493.81
3.....	494.16	-	493.38	493.26	493.26	493.30	493.09	493.19	494.06	494.35	494.24	493.71
4.....	494.25	-	493.36	493.32	493.27	493.30	493.09	493.25	494.05	494.29	494.18	493.85
5.....	494.12	-	493.35	493.29	493.30	493.29	493.08	493.27	494.13	494.34	494.18	493.71
6.....	494.31	-	493.36	493.26	493.27	493.28	493.10	493.27	494.07	494.33	494.19	493.76
7.....	494.46	-	493.35	493.44	493.27	493.28	493.10	493.26	494.10	494.24	494.25	493.71
8.....	494.26	-	493.38	493.25	493.25	493.23	493.12	493.26	494.09	494.27	494.19	493.74
9.....	494.26	-	-	493.39	493.25	493.24	493.08	493.41	494.08	494.32	494.28	493.81
10.....	494.27	-	493.33	493.27	493.26	493.21	493.10	493.46	494.09	494.27	494.22	493.61
11.....	494.18	-	493.12	493.21	493.28	493.25	493.06	493.39	494.16	494.30	494.19	493.54
12.....	494.37	-	-	493.25	493.24	493.23	493.08	493.38	494.18	494.24	494.21	493.65
13.....	494.30	493.46	493.39	493.27	493.23	493.24	493.06	493.57	494.25	494.11	494.14	493.64
14.....	494.21	493.51	493.38	493.25	493.24	493.21	493.13	493.46	494.24	494.26	494.23	493.61
15.....	494.03	493.50	493.31	493.25	493.27	493.19	493.03	493.68	494.29	494.26	494.15	493.63
16.....	494.11	493.60	493.28	493.26	493.25	493.21	493.08	493.68	494.23	494.29	494.34	493.54
17.....	494.19	493.61	493.30	493.25	493.29	493.19	492.98	493.67	494.23	494.30	494.36	493.43
18.....	494.21	493.55	493.33	493.33	493.33	493.17	493.06	493.70	494.25	494.26	493.91	493.21
19.....	494.16	493.21	493.36	493.27	493.23	493.20	493.08	493.70	494.30	494.31	494.03	493.31
20.....	494.09	493.53	493.30	493.21	493.21	493.16	493.13	493.65	494.30	494.22	494.04	493.21
21.....	-	493.36	493.35	493.23	493.21	493.17	493.12	493.70	494.33	494.30	494.06	493.24
22.....	-	493.56	493.36	493.27	493.32	493.14	493.08	493.75	494.26	494.28	493.96	493.21
23.....	-	493.39	493.31	493.27	493.27	493.17	493.11	493.83	494.30	494.21	493.98	493.17
24.....	-	493.36	493.36	493.29	493.26	493.18	493.10	493.84	494.36	494.22	493.97	493.24
25.....	-	493.62	493.32	493.25	493.26	493.15	493.14	493.86	494.20	494.27	494.26	493.01
26.....	-	493.32	493.35	493.23	493.16	493.18	493.13	493.88	494.37	494.21	493.96	492.94
27.....	-	493.35	493.31	493.23	493.26	493.19	493.18	493.91	494.31	494.17	493.86	492.90
28.....	-	493.36	493.35	493.24	493.26	493.16	493.18	493.99	494.29	494.21	493.91	492.85
29.....	-	493.35	493.28	493.32	-	493.16	493.18	493.93	494.33	494.23	493.91	492.85
30.....	-	493.38	493.31	493.31	-	493.14	493.17	493.93	494.34	494.30	493.89	492.76
31.....	-	-	493.26	493.30	-	493.16	-	493.97	-	494.22	494.04	-

Location: Lat. 62° 40', long. 114° 15', Northwest Territories, below Bluefish Lake dam at inlet at north end of Prosperous Lake and about fifteen miles north of Yellowknife on Yellowknife Bay, Great Slave Lake. Drainage Area: 4,350 square miles. Period of Record: January to October 1939, January to July 1940 and January 1941 to date. Average Discharge: (17 years) - 857 cfs. Extremes Recorded: Daily - Maximum, (Regulated) 31 July 1957, 3,212 cfs, Minimum, (Regulated) 2 July 1943, 146 cfs. Revisions: 1939, W.R.P. 117; April 1942 mean discharge has been corrected to 511 cfs. Remarks: Data supplied by Consolidated Mining and Smelting Company. Since 26 January 1941, published figures are the sum of the flow past Bluefish Lake Dam above Prosperous Lake and the flow diverted to the power plant at site Y2.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	1,798	1,330	1,064	936	818	712	594	545	1,887	1,843	1,963	1,650
2.....	1,793	1,313	1,058	935	806	712	594	541	1,888	1,890	1,936	1,644
3.....	1,769	1,313	1,053	932	794	712	587	437	1,871	1,963	1,890	1,632
4.....	1,752	1,307	1,040	929	791	706	589	528	1,829	1,993	1,870	1,631
5.....	1,733	1,307	1,040	931	784	680	593	528	1,840	2,022	1,847	1,619
6.....	1,703	1,293	1,036	929	772	688	589	531	1,853	2,056	1,817	1,609
7.....	1,674	1,281	1,033	927	760	703	585	552	1,811	2,111	1,816	1,596
8.....	1,662	1,267	1,025	919	760	687	580	531	1,799	2,129	1,849	1,597
9.....	1,650	1,256	1,022	913	759	680	571	703	1,781	2,141	1,818	1,597
10.....	1,643	1,251	1,018	911	749	671	547	750	1,747	2,142	1,806	1,640
11.....	1,626	1,238	1,018	906	738	673	557	809	1,735	2,142	1,781	1,639
12.....	1,584	1,227	1,013	900	739	669	563	876	1,724	2,152	1,776	1,644
13.....	1,577	1,214	1,009	892	736	665	577	1,080	1,698	2,045	1,753	1,637
14.....	1,572	1,214	1,008	877	732	656	574	1,217	1,686	2,121	1,717	1,625
15.....	1,566	1,214	1,004	857	727	650	559	1,346	1,687	2,133	1,685	1,612
16.....	1,525	1,209	1,004	858	728	650	548	1,430	1,692	2,134	1,668	1,612
17.....	1,525	1,191	1,000	858	732	652	565	1,501	1,693	2,123	1,644	1,643
18.....	1,501	1,179	996	858	734	603	565	1,557	1,682	2,075	1,626	1,660
19.....	1,483	1,168	991	862	732	605	566	1,608	1,675	2,067	1,603	1,672
20.....	1,471	1,161	985	873	731	624	564	1,667	1,675	2,080	1,577	1,673
21.....	1,449	1,132	979	862	744	635	560	1,694	1,663	2,071	1,563	1,690
22.....	1,437	1,111	977	862	733	620	560	1,741	1,665	2,069	1,607	1,656
23.....	1,413	1,111	964	857	728	607	558	1,782	1,664	2,062	1,590	1,644
24.....	1,400	1,110	968	845	715	594	552	1,795	1,652	2,036	1,563	1,656
25.....	1,389	1,110	968	845	706	582	550	1,818	1,694	2,010	1,536	1,661
26.....	1,376	1,106	968	842	713	593	549	1,841	1,713	2,012	1,560	1,643
27.....	1,364	1,093	946	839	715	596	550	1,870	1,731	2,005	1,536	1,631
28.....	1,358	1,082	932	834	711	600	549	1,877	1,754	2,005	1,524	1,619
29.....	1,358	1,082	950	822	-	605	548	1,883	1,777	1,988	1,573	1,611
30.....	1,352	1,077	952	821	-	601	548	1,889	1,808	1,947	1,609	1,589
31.....	1,348	-	935	819	-	597	-	1,889	-	1,979	1,657	-
Mean	1,544	1,198	999	879	746	646	566	1,252	1,746	2,050	1,702	1,634
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	94,910	71,300	61,400	54,050	41,430	39,720	33,700	76,990	103,900	126,000	104,600	97,250

The Year..... Discharge: Daily - Maximum 12 July, 2,152

- Minimum 3 May, 437

Mean 1,251, Per Square Mile 0.29

Runoff: Acre-feet 905,200; Depth in inches on drainage area 3.90

LIARD RIVER NEAR LOWER POST - STATION No. 10BE₁

Location: Lat. 59° 24' 48", long. 126° 05' 41", British Columbia, on Alaska Highway bridge at Lower Liard Crossing, four hundred and ninety-six miles north of Dawson Creek. Drainage Area: 38,800 square miles. Gauge: Wire-weight. Measurement of Discharge: From bridge. Period of Record: July to September 1944; mainly continuous June 1946 to date. Average Discharge: (8 years) - 34,100 cfs. Extremes Recorded: Daily - Maximum, 1 June 1947, 223,000 cfs, Minimum, 14 to 26 March 1952, 5,100 cfs. Remarks: Records good; fair during ice period. Formerly published as Liard River near Watson Lake.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	22,800	17,600	9,810	9,610	9,040	7,760	6,610	30,500e	113,000	57,600	29,700	22,100
2.....	22,900	17,400	9,800	9,600	9,000	7,720	6,600	30,500	108,000e	57,400e	28,100	22,000e
3.....	22,700	17,300	9,800	9,600	8,950	7,680	6,580	30,700	104,000	57,300	27,200e	22,000
4.....	32,800	17,400	9,800	9,600	8,900	7,640	6,570	32,200e	103,000e	55,800e	26,400	22,000e
5.....	32,000	17,400	9,800	9,600	8,860	7,600	6,560	33,700	102,000	54,300	25,900e	21,900
6.....	29,800	18,100	9,800	9,590	8,800	7,560	6,540	34,400e	102,000e	53,800e	25,400	22,000e
7.....	26,500	19,800	9,790	9,580	8,750	7,520	6,520	35,200	103,000	53,300	25,900e	22,200
8.....	23,600	11,300	9,790	9,570	8,700	7,480	6,500	33,200e	112,000e	51,900e	26,400	22,600e
9.....	22,900	10,500b	9,780	9,560	8,650	7,440	6,430	31,200	120,000	50,500	27,100e	23,000
10.....	22,800	10,200	9,780	9,550	8,600	7,400	6,400	31,100e	114,000e	49,700e	27,800	23,200e
11.....	22,800	10,200	9,770	9,540	8,550	7,360	6,400	31,000	108,000e	48,900	30,000e	23,500
12.....	22,600	10,200	9,760	9,530	8,500	7,320	6,440	30,800e	102,000	48,100e	32,100	23,800e
13.....	22,500	10,100	9,750	9,520	8,450	7,280	6,500	30,700	93,000e	47,300	31,300e	24,000
14.....	22,500	10,100	9,750	9,510	8,400	7,240	6,620	33,000e	84,100	46,200e	30,500	24,000e
15.....	22,400	10,100	9,740	9,500	8,360	7,200	6,780	35,200	75,800e	45,000	29,500	24,100
16.....	22,100	10,000	9,730	9,490	8,320	7,170	7,200	35,400	67,600	41,700	28,400e	24,200
17.....	21,600	10,000	9,720	9,490	8,280	7,140	7,600	34,600e	67,100e	41,500e	27,200	24,200e
18.....	21,000	10,000	9,710	9,490	8,240	7,110	8,240	33,900	66,600	41,300	27,200e	24,200e
19.....	20,500	10,000	9,710	9,480	8,200	7,080	9,150	33,600e	65,200e	38,300	27,100	24,200
20.....	19,400	10,000	9,700	9,480	8,160	7,050	10,200	33,200	63,800	38,200e	26,800e	24,200e
21.....	18,700	10,000	9,700	9,470	8,120	7,030	12,000	45,500e	62,600e	38,000	26,500	24,200e
22.....	16,700	10,000	9,690	9,470	8,080	7,010	13,400	57,800	61,300	37,600e	26,200e	24,200
23.....	14,800	10,000	9,680	9,470	8,040	6,960	15,300	66,100e	58,000e	37,300	26,000	24,200e
24.....	12,500	10,000	9,680	9,470	8,000	6,910	17,400	74,400	54,700	36,400	25,800e	25,000
25.....	11,700	10,000	9,670	9,460	7,950	6,870	19,300	92,200e	56,200e	35,500e	25,600e	24,200e
26.....	11,000	9,950	9,660	9,400	7,900	6,830	22,000	110,000	57,700	34,600	25,400	24,300e
27.....	11,300	9,920	9,660	9,340	7,850	6,790	25,200	112,000e	58,900e	34,000e	24,800e	24,300
28.....	15,200	9,900	9,650	9,280	7,800	6,740	28,000b	114,000	60,100	33,300	24,200	24,400e
29.....	16,200	9,870	9,640	9,200	-	6,690	30,700	114,000e	59,900e	32,200e	23,600e	24,500
30.....	17,600	9,830	9,630	9,150	-	6,670	30,500	115,000	59,700	31,200	23,000	25,000
31.....	17,400	-	9,620	9,100	-	6,610	-	114,000e	-	30,400e	22,600e	-
Mean	20,600	11,900	9,730	9,470	8,410	7,190	11,800	53,800e	82,100e	43,800e	26,900e	23,600e
Per sq. mi.	0.53	0.31	0.25	0.24	0.22	0.19	0.30	1.39	2.12	1.13	0.69	0.61
Acre-feet in 1,000	1,268	708.4	598.2	582.5	467	442	702	3,311	4,886	2,695	1,654	1,402

The Year..... Discharge: Daily - Maximum 9 June, 120,000

- Minimum 10 and 11 April, 6,400

Mean 25,900; Per Square Mile 0.67

Runoff: Acre-feet 18,720,000; Depth in inches on drainage area 9.06

e - Estimated.

b - Ice conditions 9 November to 28 April.

Location: Lat. 60° 14' 35", long. 123° 28' 45", Northwest Territories, at Hudson's Bay Company Post. Gauge: Staff. Period of Record: Gauge heights only, mainly open water May 1942 to date. Extremes Recorded: Daily - Maximum, 8 May 1955, 88.20 feet, Minimum, 31 July 1956, 61.90 feet. Remarks: Station originally established by Hudson's Bay Company and re-established in September 1943 by this Branch.

Daily Gauge Heights in Feet for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	68.00	66.50	-	-	-	-	-	80.25	76.50	72.69	69.70	68.45
2.....	68.00	66.90	-	-	-	-	-	82.50	76.60	72.30	69.55	68.45
3.....	68.00	67.10	-	-	-	-	-	82.20	75.50	72.20	69.50	68.50
4.....	68.50	67.30	-	-	-	-	-	73.50	75.20	72.15	69.40	68.45
5.....	69.20	67.40	-	-	-	-	-	71.20	75.50	72.05	69.10	68.40
6.....	69.10	67.50	-	-	-	-	-	71.30	75.70	72.05	68.95	68.30
7.....	68.40	67.80	-	-	-	-	-	71.60	76.00	72.15	66.85	68.30
8.....	68.20	67.90	-	-	-	-	-	72.30	76.60	72.15	68.50	68.35
9.....	68.00	68.00	-	-	-	-	-	72.50	76.70	72.05	69.70	68.40
10.....	67.90	68.00	-	-	-	-	-	72.40	76.90	72.15	69.90	68.40
11.....	67.90	68.00	-	-	-	-	-	71.50	77.20	72.50	70.30	68.40
12.....	67.90	68.10	-	-	-	-	-	71.20	77.00	72.75	70.30	68.40
13.....	67.90	68.20	-	-	-	-	-	70.80	76.10	73.25	69.75	68.40
14.....	67.90	68.20	-	-	-	-	-	70.50	75.20	73.35	69.70	68.40
15.....	67.90	68.45	-	-	-	-	-	70.50	74.70	73.35	69.55	68.40
16.....	67.80	69.15	-	-	-	-	-	70.30	74.40	73.30	-	68.45
17.....	67.70	69.15	-	-	-	-	-	70.50	74.20	72.55	69.35	68.50
18.....	67.70	69.15	-	-	-	-	-	70.60	74.00	72.60	69.25	68.60
19.....	67.70	-	-	-	-	-	-	70.80	73.80	72.25	69.05	68.70
20.....	67.40	-	-	-	-	-	-	70.90	73.50	71.45	69.20	68.75
21.....	67.30	-	-	-	-	-	-	71.20	73.30	71.35	68.95	68.80
22.....	67.30	-	-	-	-	-	-	71.55	73.20	71.30	68.85	68.85
23.....	67.20	-	-	-	-	-	-	72.10	72.90	71.10	68.85	68.90
24.....	66.90	-	-	-	-	-	-	73.20	72.60	70.80	68.85	68.85
25.....	66.70	-	-	-	-	-	-	74.20	72.50	70.75	68.75	68.85
26.....	66.30	-	-	-	-	-	-	74.90	72.40	70.65	68.80	68.80
27.....	65.90	-	-	-	-	-	72.00	75.40	72.50	70.41	68.80	68.70
28.....	65.70	-	-	-	-	-	72.20	76.00	72.50	70.30	68.80	68.60
29.....	65.90	-	-	-	-	-	79.10	75.70	72.80	70.10	68.75	68.50
30.....	65.90	-	-	-	-	-	79.70	75.70	72.93	70.00	68.65	68.40
31.....	66.20	-	-	-	-	-	-	76.50	-	69.90	68.60	-

Location: Lat. 57° 14' 03", long. 122° 41' 39", British Columbia, on Alaska Highway bridge four miles upstream from Barker Creek and one hundred and thirty-eight miles south of Fort Nelson. Drainage Area: 800 square miles. Gauge: Wire-weight. Measurement of Discharge: From bridge. Period of Record: Mainly open water July 1944 to date. Average Discharge: (5 years) - 818 cfs. Extremes Recorded: Daily - Maximum, 25 May 1948, 15,800 cfs, Minimum, 18 February 1948, 78 cfs. Remarks: Records good; fair during ice period.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	705e	440	288	223	205	193	188	190	1,880	1,140	576	475e
2.....	693	435	285	222	205	193	188	190	1,750e	1,170e	558e	480
3.....	670e	426	281	220	205	193	188	190	1,620	1,190	546	470e
4.....	655e	425	279	220	205	192	190	190	1,530e	1,260e	550e	456
5.....	644	420	276	220	205	192	190	190	1,500	1,370	564	447e
6.....	627e	413	273	219	205	192	190	190	1,700e	1,410e	580e	428
7.....	618	405	270	218	205	192	190	190	2,000	1,430	600	429e
8.....	610e	400	267	218	205	192	190	193	1,930e	1,550e	610e	432
9.....	600	390	267	217	202	191	190	195	1,880	1,710	606	437e
10.....	590e	390	265	215	202	191	190	200	1,800e	1,600e	598e	448
11.....	576	385	260	215	201	190	190	207	1,770e	1,500e	582	435e
12.....	570e	380	260	214	201	190	188	225	1,750	1,420	570e	424
13.....	564	370	258	213	201	190	188	250	1,720e	1,350e	546	465e
14.....	557e	368	257	213	201	190	188	290	1,710	1,300	540e	500
15.....	552	363	253	212	201	190	188	345	1,600e	1,260e	534	490e
16.....	556e	355	249	211	200	188	188	408	1,540e	1,230	550e	480
17.....	558	350	247	211	200	188	188	520b	1,460	1,100e	576	496e
18.....	553e	350	244	211	200	188	188	752	1,400e	1,050	500e	510
19.....	546	340	240	210	200	188	188	900e	1,370	975e	475	525e
20.....	542e	335	238	209	198	188	188	1,140	1,330e	923	465e	534
21.....	540	332	238	207	198	188	187	1,600e	1,300	850e	465	527e
22.....	530e	328	237	206	198	188	187	2,110	1,280e	800	475e	522
23.....	516	320	235	206	196	188	187	2,500e	1,270	770e	485	517e
24.....	500e	320	233	205	196	188	187	3,040	1,230e	745	490e	510
25.....	495	313	230	205	196	188	187	3,400e	1,180	720e	495	513e
26.....	487e	309	230	208	196	188	188	3,850	1,160e	708	485e	516
27.....	485	305	230	208	196	188	189	3,450e	1,130	670e	475	505e
28.....	470b	302	227	208	196	188	189	3,080	1,250e	644	475e	500
29.....	465	297	227	209	-	188	189	2,600e	1,320	608e	475	485e
30.....	457	290	225	205	-	188	190	2,110	1,230e	594	472e	480
31.....	450	-	223	205	-	188	-	2,030e	-	585e	470	-
Mean	561e	362	251	212	201	190	189	1,180	1,520e	1,080e	529e	481e
Per sq. mi.	0.70	0.45	0.31	0.26	0.25	0.24	0.24	1.48	1.90	1.35	0.66	0.60
Acre-feet	34,470	21,530	15,460	13,060	11,150	11,660	11,220	72,840	90,430	66,710	32,510	28,630

The Year..... Discharge: Daily - Maximum 26 May, 3,850

- Minimum 21 to 25 April, 187

Mean 566; Per Square Mile 0.71

Runoff: Acre-feet 409,700; Depth in inches on drainage area 9.60

b - Ice conditions 28 October to 17 May.

e - Estimated.

Location: Lat. 58° 47' 18", long. 122° 39' 33", British Columbia, on Alaska Highway bridge, two miles southeast of Fort Nelson. Drainage Area: 7,600 square miles. Gauge: Wire-weight. Measurement of Discharge: From bridge. Period of Record: Periods of varying length August 1944 to date. Extremes Recorded: Daily - Maximum, 14 July 1956, 140,000 cfs, Minimum, 24 to 26 February 1949, 325 cfs. Remarks: Records good; fair during ice period.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	5,500e	2,250	1,160	760	657	570	465	455	10,300e	10,300e	6,900e	4,020
2.....	6,200e	2,180	1,140	755	657	565	465	455	9,600e	10,000	6,580	3,700e
3.....	6,450	2,100	1,120	745	650	560	465	455	9,180	9,800e	6,350e	3,060
4.....	5,850e	2,030	1,100	735	645	558	465	455	8,900e	9,690	6,260e	2,830e
5.....	5,450	1,950	1,070	730	645	550	465	455	8,790	10,200e	6,060	2,480
6.....	5,200e	1,890	1,060	730	640	550	460	458	9,500e	10,600e	6,180e	2,480e
7.....	4,980e	1,820	1,050	730	637	550	460	465	10,400	11,200e	6,200e	2,480
8.....	4,770e	1,780	1,030	730	637	540	460	470	10,800e	11,700	6,250e	2,400e
9.....	4,600e	1,730	1,020	725	630	530	460	480	11,300e	12,600e	6,380	2,360
10.....	4,450e	1,700	1,000	720	625	525	460	495	11,900	13,700	6,050e	2,320e
11.....	4,280e	1,650	980	720	625	525	460	520	11,000e	15,000	5,700e	2,260
12.....	4,150e	1,630	970	710	620	520	460	550	9,540	16,100e	5,380	2,420e
13.....	4,000e	1,600	960	710	617	520	460	590	10,300e	17,800e	5,400e	2,580e
14.....	3,900e	1,540	950	710	610	510	460	640	11,000	19,100	5,450	2,800e
15.....	3,860	1,520	930	710	605	510	460	900	10,800e	19,700e	5,410e	2,950e
16.....	3,700e	1,485	920	700	605	510	455	1,100	10,600e	20,100e	5,380	3,200e
17.....	3,600	1,460	910	700	605	508	455	1,600	10,400e	20,300	5,250e	3,360
18.....	3,400e	1,440	890	700	605	490	455	2,000	10,100	20,100	5,120e	3,330e
19.....	3,280	1,420	880	698	600	485	455	2,800b	9,900e	18,000e	5,010	3,320e
20.....	3,160b	1,370	870	698	595	485	455	3,520	9,750e	14,500e	4,850e	3,310e
21.....	3,070	1,360	860	695	590	475	450	4,250e	9,510	12,600e	4,700	3,300e
22.....	3,000	1,340	860	690	590	475	450	5,320	9,600e	10,100	4,760e	3,280
23.....	2,900	1,320	850	687	585	470	450	6,850e	9,800e	9,300e	4,840	3,270e
24.....	2,800	1,280	830	685	585	470	450	8,400	10,000e	8,550	4,950e	3,210e
25.....	2,750	1,260	820	680	585	470	450	8,650e	10,300e	8,300e	5,100e	3,180
26.....	2,650	1,250	810	675	578	470	455	9,200e	10,400e	8,200	5,250	3,000e
27.....	2,570	1,230	800	675	578	470	455	9,450	10,700	8,100e	5,260e	2,800
28.....	2,500	1,200	800	670	570	470	455	10,400e	10,700e	8,000e	5,280	2,650e
29.....	2,440	1,180	790	660	-	470	455	11,200	10,600e	7,900e	5,080e	2,500e
30.....	2,370	1,170	780	660	-	470	455	11,000e	10,500	7,700	4,890	2,340
31.....	2,300	-	770	657	-	470	-	10,900	-	7,300e	4,450e	-
Mean	3,880e	1,570	935	705	613	508	458	3,690	10,200e	12,500e	5,510e	2,910e
Per sq.mi.	0.51	0.21	0.12	0.09	0.08	0.07	0.06	0.49	1.34	1.64	0.72	0.38
Acre-feet	238,300	93,480	57,480	43,340	34,060	31,220	27,220	227,100	607,300	766,700	338,600	172,900

The Year..... Discharge: Daily - Maximum 17 July, 20,300
 - Minimum 21 to 25 April, 450
 Mean 3,640; Per Square Mile 0.48
 Runoff: Acre-feet 2,638,000; Depth in inches on drainage area 6.49

e - Estimated.

b - Ice conditions 20 October to 19 May.

Location: Lat. 59° 57' 27", long. 128° 08' 42", British Columbia, on Alaska Highway bridge, eight miles from mouth.
 Drainage Area: 2,600 square miles. Gauge: Wire-weight. Measurement of Discharge: From bridge. Period of Record: Miscellaneous measurements in 1944, 1945 and 1946; mainly open water October 1946 to date. Extremes Recorded: Daily - Maximum, 28 June 1955, 33,300 cfs. Minimum, 1 November 1950, 450 cfs. Remarks: Records good. Formerly published as Hyland River near Watson Lake.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	1,900	2,150	810	742	680	638	552	2,320	12,100	6,950	3,500	4,660
2.....	1,810	2,220e	808	742	680	635	550	2,420e	12,200	7,310	3,440	4,450
3.....	1,820	2,330e	805	740	678	628	548	2,570	12,300	5,980	3,470	4,230
4.....	1,740	2,450	803	740	678	623	548	2,660e	15,300	6,090	3,520	4,080
5.....	1,840	2,260e	800	740	678	620	546	2,730e	15,100	6,370	3,570	3,730
6.....	1,760	2,150	798	740	678	618	545	2,800e	16,300	6,470	3,620	4,100
7.....	1,770	2,000e	795	740	675	616	544	2,840e	17,300	6,350	3,630	4,190
8.....	1,790	1,900	790	740	675	614	548	2,890e	18,600	6,370	3,630	4,120
9.....	1,800	1,810	785	740	675	612	550	2,920e	19,200	6,810	3,780	4,060
10.....	1,810	1,670	780	738	677	610	555	2,980e	18,100	6,810	3,840	4,100
11.....	1,900	1,360b	778	735	678	608	558	3,030e	14,600	6,420	4,140	4,150
12.....	2,350	1,200	778	730	680	606	564	3,110	11,500	6,090	4,280	4,100
13.....	2,290e	1,050	778	727	680	604	568	3,000e	9,100	6,230	5,520	3,990
14.....	2,230	955	777	724	678	602	575	2,820e	8,250	6,520	5,680	3,860
15.....	2,120	945	777	722	675	600	582	2,730	8,310	6,000	4,580	3,740
16.....	1,900	920	777	718	672	598	600	3,010	8,580	6,020	4,320	3,700
17.....	1,900e	915	776	714	670	595	628	3,030e	7,960	5,590	4,230	4,060
18.....	1,900	905	775	710	668	593	655	3,060e	7,470	5,200	4,140	4,210
19.....	1,760e	885	775	708	665	590	700	3,090e	7,440	4,810	4,170	4,380
20.....	1,620e	865	773	705	662	587	750	3,110	7,550	4,850	3,990	4,150
21.....	1,480	855	773	707	660	583	825	3,170e	7,310	4,640	4,280	4,100
22.....	1,360e	850	773	708	658	580	930	3,260e	7,100	4,390	4,510	4,060
23.....	1,240	845	768	704	655	575	1,070	3,350e	6,810	4,170	4,230	3,970
24.....	1,100	835	760	700	653	568	1,250	3,460	6,780	4,120	4,300	3,940
25.....	1,150e	830	755	696	650	566	1,390b	4,040e	8,040	4,100	3,940	3,890
26.....	1,200	830	750	690	646	564	1,580	5,300e	7,630	4,030	3,730	3,810
27.....	1,430e	830	748	687	643	562	1,700e	6,700e	7,420	4,060	3,630	3,740
28.....	1,660	830	746	686	640	560	1,860e	8,550	8,390	3,970	3,740	3,570
29.....	2,040e	822	744	685	-	559	2,000e	8,800e	8,330	3,730	3,790	3,410
30.....	3,000	818	742	683	-	559	2,160e	9,130	7,250	3,540	3,870	3,360
31.....	2,530e	-	742	682	-	556	-	10,000e	-	3,540	4,380	-
Mean	1,810	1,310	775	717	668	594	881	3,960e	10,700	5,400	4,050	4,000
Per sq. mi.	0.70	0.50	0.30	0.28	0.23	0.23	0.34	1.52	4.12	2.08	1.56	0.54
Acre-feet	111,500	77,920	47,680	44,080	37,100	36,550	52,430	243,700	639,300	332,300	248,800	237,800

The Year..... Discharge: Daily - Maximum 9 June, 19,200

- Minimum 7 April, 544

Mean 2,910; Per Square Mile 1.12

Runoff: Acre-feet 2,109,000; Depth in inches on drainage area 15.20

e - Estimated.

b - Ice conditions 11 November to 25 April.

Location: Lat. 58° 27' 35", long. 130° 02' 00", British Columbia, on wharf at south end of Dease Lake seventy-eight miles northeast of Telegraph Creek. Drainage Area: 612 square miles. Gauge: Staff. Measurement of Discharge: From boat or by wading, at outlet of Dease Lake immediately downstream from Thibert Creek. Period of Record: Miscellaneous measurements in 1954 and 1956; part-year records October 1956 to date. Extremes Recorded: Daily - Maximum, 24 May 1957, 3,360 cfs, Minimum, 22 to 31 March 1958, 74 cfs. Remarks: Records fair. For gauge heights on Dease Lake, see Dease Lake near Telegraph Creek.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	241	214	174	100	91	81	-	-	1,330	435	217	178
2.....	241	214	172	100	91	81	-	-	1,300	430	217	178
3.....	241	211	170	100	90	81	-	-	1,300	425	217	181
4.....	238	211	166	100	90	80	-	-	1,280	420	217	181
5.....	238	211	162	99	90	80	-	-	1,260	410	217	181
6.....	235	211	158	99	89	80	-	-	1,260	395	217	184
7.....	235	208	154	98	88	79	-	-	1,230	380	211	184
8.....	235	208	150	98	88	79	-	-	1,150	370	205	178
9.....	232	205	147b	98	87	78	-	-	1,100	353	199	175
10.....	232	205	143	98	87	78	-	-	1,010	328	196	166
11.....	232	202	139	97	87	78	-	-	968	320	190	166
12.....	229	202	134	97	86	78	-	-	942	316	199	166
13.....	229	199	130	96	86	77	-	-	908	316	196	166
14.....	229	199	127	96	86	77	-	-	891	312	196	166
15.....	226	196	124	96	85	77	-	-	848	308	190	166
16.....	226	196	121	96	85	76	-	-	840	304	190	166
17.....	226	196	118	95	85	76	-	-	772	296	187	169
18.....	226	193	116	95	85	76	-	-	755	288	184	169
19.....	226	193	115	95	84	76	-	-	723	276	184	169
20.....	226	190	114	95	84	76	-	-	683	268	181	172
21.....	223	190	111	94	84	75	-	-	652	260	178	172
22.....	223	188	109	94	84	74	-	-	622	256	178	172
23.....	223	188	108	94	83	74	-	-	593	256	175	175
24.....	220	186	107	93	83	74	-	-	565	248	172	175
25.....	220	184	106	93	82	74	-	-	544	248	172	175
26.....	220	182	105	93	82	74	-	-	518	245	172	175
27.....	220	182	104	92	82	74	-	-	494	241	175	175
28.....	217	180	103	92	82	74	-	-	465	241	175	175
29.....	217	178	102	92	-	74	-	-	460	238	178	172
30.....	217	176	101	92	-	74	-	-	460	234	178	172
31.....	214	-	100	91	-	74b	-	-	-	231	178e	-
Mean	228	197	129	96	86	77	-	-	864	311	192	173
Per sq. mi.	0.37	0.32	0.21	0.16	0.14	0.13	-	-	1.41	0.51	0.31	0.28
Acre-feet	14,000	11,700	7,910	5,890	4,770	4,720	-	-	51,420	19,140	11,780	10,310

The Period..... Discharge: Daily - Maximum 1 June, 1,330
 (304 days) - Minimum 22 to 31 March, 74

Mean 235; Per Square Mile 0.38

Runoff: Acre-feet 141,600; Depth in inches on drainage area 4.34

b - Ice conditions 9 December to 31 March.

Location: Lat. 59° 11' 12", long. 129° 12' 25", one mile below McDame Creek. Drainage Area: 2,700 square miles. Gauge: Recording. Measurement of Discharge: From cable. Period of Record: Miscellaneous measurement in 1957; part-year records October 1957 to date. Extremes Recorded: Daily - Maximum, 26 June 1957, 6,400 cfs, Minimum, 20 March 1958, 505 cfs. Remarks: Records good.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	-	-	-	-	-	-	-	-	-	-	2,080	-
2.....	-	-	-	-	-	-	-	-	-	-	2,030	-
3.....	-	-	-	-	-	-	-	-	-	-	2,000	-
4.....	-	-	-	-	-	-	-	-	-	-	1,990	-
5.....	-	-	-	-	-	-	-	-	-	-	2,030	-
6.....	-	-	-	-	-	-	-	-	-	-	2,110	-
7.....	-	-	-	-	-	-	-	-	-	-	2,400	-
8.....	-	-	-	-	-	-	-	-	-	-	2,430	-
9.....	-	-	-	-	-	-	-	-	-	-	2,260	-
10.....	-	-	-	-	-	-	-	-	-	-	2,100	-
11.....	-	-	-	-	-	-	-	-	-	-	1,990	-
12.....	-	-	-	-	-	-	-	-	-	-	1,890	-
13.....	1,860	-	-	-	-	-	-	-	-	-	1,840	-
14.....	2,120	-	-	-	-	-	-	-	-	-	1,900	-
15.....	2,190	-	-	-	-	-	-	-	-	-	1,900	-
16.....	2,040	-	-	-	-	-	-	-	-	-	2,040	-
17.....	1,960	-	-	668b	-	-	-	-	-	-	2,050	2,120x
18.....	1,860	-	-	-	-	-	-	-	-	-	1,900	-
19.....	1,760	-	-	-	-	-	-	-	-	-	1,830	-
20.....	1,700	-	-	-	-	505b	-	-	-	-	1,800	-
21.....	1,660	-	-	-	-	-	-	-	-	-	1,830	-
22.....	1,340	-	-	-	-	-	-	-	-	3,500x	1,960	-
23.....	1,400	-	-	-	-	-	-	-	-	3,200e	1,910	-
24.....	-	-	-	-	-	-	-	-	-	3,000e	2,090	-
25.....	-	-	-	-	-	-	-	-	-	2,790e	2,120	-
26.....	-	-	-	-	-	-	-	-	-	2,560e	2,120e	-
27.....	-	-	-	-	-	-	-	-	-	2,370e	2,080e	-
28.....	-	-	-	-	-	-	-	-	-	2,190e	1,960e	-
29.....	-	-	-	-	-	-	-	-	-	2,040x	1,880e	-
30.....	-	-	-	-	-	-	-	-	-	1,980	1,800e	-
31.....	-	-	-	-	-	-	-	-	-	2,050	1,720e	-
Mean	-	-	-	-	-	-	-	-	-	-	2,000	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	0.74	-
Acre-feet	-	-	-	-	-	-	-	-	-	-	123,100	-

e - Estimated.

x - Staff gauge readings.

b - Ice conditions.

Location: Lat. 58° 27' 35", long. 130° 02' 00", British Columbia, on wharf at south end of Dease Lake, seventy-eight miles northeast of Telegraph Creek. Gauge: Staff. Period of Record: Mainly open water October 1943 to September 1955 and October 1956 to date. Extremes Recorded: Daily - Maximum, 24 May 1957, 5.12 feet, Minimum, 24 December 1951, 0.05 foot. Remarks: For discharge from Dease Lake, see Dease River at outlet of Dease Lake near Telegraph Creek.

Daily Gauge Heights in Feet for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	1.17	1.08	0.92	-	-	-	-	-	3.06	1.93	1.41	1.28
2.....	1.17	1.08	0.91	-	-	-	-	-	3.02	1.92	1.41	1.28
3.....	1.17	1.07	0.90	-	-	-	-	-	3.02	1.91	1.41	1.29
4.....	1.16	1.07	0.88	-	-	-	-	-	3.00	1.90	1.41	1.29
5.....	1.16	1.07	0.86	-	-	-	-	-	2.98	1.88	1.41	1.29
6.....	1.15	1.07	0.84	-	-	-	-	-	2.98	1.85	1.41	1.30
7.....	1.15	1.06	0.82	-	-	-	-	-	2.94	1.82	1.39	1.30
8.....	1.15	1.06	0.80	-	-	-	-	-	2.86	1.80	1.37	1.28
9.....	1.14	1.05	-	-	-	-	-	-	2.80	1.76	1.35	1.27
10.....	1.14	1.05	-	-	-	-	-	-	2.70	1.70	1.34	1.24
11.....	1.14	1.04	-	-	-	-	-	-	2.65	1.68	1.32	1.24
12.....	1.13	1.04	-	-	-	-	-	-	2.62	1.67	1.35	1.24
13.....	1.13	1.03	-	-	-	-	-	-	2.58	1.67	1.34	1.24
14.....	1.13	1.03	-	-	-	-	-	-	2.56	1.66	1.34	1.24
15.....	1.12	1.02	-	-	-	-	-	-	2.51	1.65	1.32	1.24
16.....	1.12	1.02	-	-	-	-	-	-	2.50	1.64	1.32	1.24
17.....	1.12	1.02	-	-	-	-	-	-	2.42	1.62	1.31	1.25
18.....	1.12	1.01	-	-	-	-	-	-	2.40	1.60	1.30	1.25
19.....	1.12	1.01	-	-	-	-	-	-	2.36	1.57	1.30	1.25
20.....	1.12	1.00	-	-	-	-	-	-	2.31	1.55	1.29	1.26
21.....	1.11	1.00	-	-	-	-	-	-	2.27	1.53	1.28	1.26
22.....	1.11	0.99	-	-	-	-	-	-	2.23	1.52	1.28	1.26
23.....	1.11	0.99	-	-	-	-	-	-	2.19	1.52	1.27	1.27
24.....	1.10	0.98	-	-	-	-	-	-	2.15	1.50	1.26	1.27
25.....	1.10	0.97	-	-	-	-	-	-	2.12	1.50	1.26	1.27
26.....	1.10	0.96	-	-	-	-	-	-	2.08	1.49	1.26	1.27
27.....	1.10	0.96	-	-	-	-	-	-	2.04	1.48	1.27	1.27
28.....	1.09	0.95	-	-	-	-	-	-	1.99	1.48	1.27	1.27
29.....	1.09	0.94	-	-	-	-	-	-	1.98	1.47	1.28	1.26
30.....	1.09	0.93	-	-	-	-	-	3.14	1.98	1.46	1.28	1.26
31.....	1.08	-	-	-	-	-	-	3.12	-	1.45	-	-

Daily Elevations in Feet for Calendar Years 1953 and 1954

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1953												
1.....	-	-	-	-	-	-	-	388.02	-	-	-	-
2.....	-	-	-	-	-	-	-	-	-	-	-	-
3.....	-	-	-	-	-	-	-	-	-	-	-	-
4.....	-	-	-	-	-	387.91	-	-	-	-	-	-
5.....	-	-	-	-	-	-	-	388.03	-	-	-	-
6.....	-	-	-	-	-	-	-	-	-	-	-	-
7.....	-	-	-	-	-	-	-	-	-	-	-	-
8.....	-	-	-	-	-	-	-	-	-	388.21	-	-
9.....	-	-	-	-	-	-	-	-	-	-	-	-
10.....	-	-	-	-	-	-	-	-	-	-	-	-
11.....	-	-	-	-	-	387.86	388.05	-	-	-	-	-
12.....	-	-	-	-	-	-	-	388.12	-	-	-	-
13.....	-	-	-	-	-	-	-	-	-	-	-	-
14.....	-	-	-	-	-	-	-	-	-	-	-	-
15.....	-	-	-	-	-	-	-	-	388.21	-	-	-
16.....	-	-	-	-	-	-	388.11	-	-	-	-	-
17.....	-	-	-	-	-	387.96	-	-	-	-	-	-
18.....	-	-	-	-	-	-	388.07	-	-	-	-	-
19.....	-	-	-	-	-	-	-	-	388.19	-	-	-
20.....	-	-	-	-	-	-	-	-	-	-	-	-
21.....	-	-	-	-	387.66	-	-	-	-	-	-	-
22.....	-	-	-	-	-	-	-	-	-	-	-	-
23.....	-	-	-	-	-	-	-	-	-	-	-	-
24.....	-	-	-	-	-	-	388.04	-	-	-	-	-
25.....	-	-	-	-	-	387.96	-	-	-	-	-	-
26.....	-	-	-	-	-	-	-	-	-	-	-	-
27.....	-	-	-	-	-	-	-	-	-	-	-	-
28.....	-	-	-	-	387.80	-	-	-	-	-	-	-
29.....	-	-	-	-	-	-	-	-	-	-	-	-
30.....	-	-	-	-	-	388.00	-	-	-	-	-	-
31.....	-	-	-	-	-	-	-	-	-	-	-	-
1954												
1.....	-	-	-	-	-	-	-	-	-	-	-	-
2.....	-	-	-	-	-	-	-	-	-	-	-	-
3.....	-	-	-	-	-	-	-	-	388.16	-	-	-
4.....	-	-	-	-	-	-	-	-	-	-	-	-
5.....	-	-	-	-	-	-	-	388.15	-	-	-	-
6.....	-	-	-	-	-	-	-	-	388.16	-	-	-
7.....	-	-	-	-	-	-	-	-	-	-	-	-
8.....	-	-	-	-	-	-	-	-	388.15	-	-	-
9.....	-	-	-	-	-	-	-	-	-	-	-	-
10.....	-	-	-	-	-	-	-	388.18	-	-	-	-
11.....	-	-	-	-	-	-	-	-	388.15	-	-	-
12.....	-	-	-	-	-	-	-	-	-	-	-	-
13.....	-	-	-	-	-	-	-	-	-	-	-	-
14.....	-	-	-	-	-	-	-	-	-	-	-	-
15.....	-	-	-	-	-	-	-	-	388.14	388.93	-	-
16.....	-	-	-	-	-	-	-	388.20	-	-	-	-
17.....	-	-	-	-	-	-	-	-	388.12	-	-	-
18.....	-	-	-	-	-	-	-	-	-	388.94	-	-
19.....	-	-	-	-	-	-	-	388.18	-	-	-	-
20.....	-	-	-	-	-	-	-	-	388.10	-	-	-
21.....	-	-	-	-	-	-	-	388.19	-	-	-	-
22.....	-	-	-	-	-	-	-	-	-	-	-	-
23.....	-	-	-	-	-	-	-	-	388.12	-	-	-
24.....	-	-	-	-	-	-	-	-	-	-	-	-
25.....	-	-	-	-	-	-	-	388.18	388.11	-	-	-
26.....	-	-	-	-	-	-	-	-	-	-	-	-
27.....	-	-	-	-	-	-	-	-	-	-	-	-
28.....	-	-	-	-	-	-	-	-	388.12	-	-	-
29.....	-	-	-	-	-	-	388.19	-	-	-	-	-
30.....	-	-	-	-	-	-	-	-	-	-	-	-
31.....	-	-	-	-	-	-	-	388.20	-	-	-	-

Daily Elevations in Feet for Calendar Years 1955 and 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1955												
1.....	-	-	-	-	-	-	-	388.22	388.14	388.24	-	-
2.....	-	-	-	-	-	-	388.21	-	-	-	-	-
3.....	-	-	-	-	-	-	-	388.26	388.34	-	-	-
4.....	-	-	-	-	-	-	-	-	-	388.14	-	-
5.....	-	-	-	-	-	-	388.21	388.24	-	-	-	-
6.....	-	-	-	-	-	-	-	-	388.31	388.19	-	-
7.....	-	-	-	-	-	-	388.22	-	-	-	-	-
8.....	-	-	-	-	-	-	-	388.22	388.29	388.29	-	-
9.....	-	-	-	-	-	-	388.25	-	-	-	-	-
10.....	-	-	-	-	-	-	-	388.25	388.21	-	-	-
11.....	-	-	-	-	-	-	-	-	-	388.10	-	-
12.....	-	-	-	-	-	-	388.18	-	-	-	-	-
13.....	-	-	-	-	-	-	-	388.26	388.23	388.31	-	-
14.....	-	-	-	-	-	-	388.23	-	-	-	-	-
15.....	-	-	-	-	-	-	-	-	388.24	388.04	-	-
16.....	-	-	-	-	-	-	388.21	388.20	-	-	-	-
17.....	-	-	-	-	-	-	-	-	388.28	-	-	-
18.....	-	-	-	-	-	-	388.14	388.26	-	388.04	-	-
19.....	-	-	-	-	-	-	-	-	388.29	-	-	-
20.....	-	-	-	-	-	-	388.27	388.24	-	388.11	-	-
21.....	-	-	-	-	-	-	-	-	-	-	-	-
22.....	-	-	-	-	-	-	388.34	388.24	388.29	388.09	-	-
23.....	-	-	-	-	-	-	-	-	-	-	-	-
24.....	-	-	-	-	-	-	388.34	388.20	388.34	-	-	-
25.....	-	-	-	-	-	-	-	-	-	388.10	-	-
26.....	-	-	-	-	-	-	388.14	-	-	-	-	-
27.....	-	-	-	-	-	388.20	-	388.34	388.34	388.10	-	-
28.....	-	-	-	-	-	-	-	-	-	-	-	-
29.....	-	-	-	-	-	388.16	388.21	-	388.24	388.07	-	-
30.....	-	-	-	-	-	-	-	388.21	-	-	-	-
31.....	-	-	-	-	-	-	388.19	-	-	-	-	-
1958												
1.....	-	-	-	-	-	-	389.77	-	390.00	-	-	-
2.....	-	-	-	-	-	389.59	-	389.89	-	389.89	-	-
3.....	-	-	-	-	-	-	389.77	-	389.98	-	-	-
4.....	-	-	-	-	-	-	-	389.89	-	389.91	-	-
5.....	-	-	-	-	-	389.70	389.79	-	390.00	-	-	-
6.....	-	-	-	-	-	-	-	389.94	-	389.89	-	-
7.....	-	-	-	-	-	-	389.79	-	390.01	-	-	-
8.....	-	-	-	-	-	389.71	-	390.07	-	389.89	-	-
9.....	-	-	-	-	-	-	389.80	-	390.00	-	-	-
10.....	-	-	-	-	-	389.68	-	389.99	-	389.91	-	-
11.....	-	-	-	-	-	-	389.77	-	389.94	-	-	-
12.....	-	-	-	-	-	389.60	-	389.98	-	389.89	-	-
13.....	-	-	-	-	-	-	389.77	-	389.94	-	-	-
14.....	-	-	-	-	-	-	-	389.98	-	389.93	-	-
15.....	-	-	-	-	-	-	389.68	-	389.94	-	-	-
16.....	-	-	-	-	-	389.67	-	390.00	-	389.94	-	-
17.....	-	-	-	-	-	-	389.68	-	389.94	-	-	-
18.....	-	-	-	-	-	389.67	-	390.09	-	389.91	-	-
19.....	-	-	-	-	-	-	389.69	-	389.94	-	-	-
20.....	-	-	-	-	-	389.69	-	389.99	-	389.93	-	-
21.....	-	-	-	-	-	-	389.84	-	-	-	-	-
22.....	-	-	-	-	-	-	-	389.99	389.99	389.93	-	-
23.....	-	-	-	-	-	389.70	389.87	-	-	-	-	-
24.....	-	-	-	-	-	-	-	389.94	389.94	389.99	-	-
25.....	-	-	-	-	-	389.78	389.87	-	-	-	-	-
26.....	-	-	-	-	389.56	-	-	390.09	390.19	389.93	-	-
27.....	-	-	-	-	-	389.71	389.79	-	-	-	-	-
28.....	-	-	-	-	389.60	-	-	389.99	389.91	389.94	-	-
29.....	-	-	-	-	-	389.77	389.79	-	-	-	-	-
30.....	-	-	-	-	389.59	-	-	389.99	389.84	389.94	-	-
31.....	-	-	-	-	-	-	389.84	-	-	-	-	-

MILK RIVER TRIBUTARY BASIN

MILK RIVER AT MILK RIVER - STATION No. 11AA₅

(International Gauging Station)

Location: Lat. 49° 09', long. 112° 05', in SE. 1/4 sec. 28, tp. 2, rge. 16, W. 4th Mer., Alberta, about fifteen miles below confluence of North and South Branches. Drainage Area: 1,104 square miles. Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: July to November 1909, April to November 1910 and April 1911 to date. Recording gauges operated since June 1917 and manual gauges prior to that date at various locations near the present site. Average Discharge: (47 years) - 291 cfs. Extremes Recorded: Daily - Maximum, 4 June 1953, 5,980 cfs, Minimum, Nil at various times; Instantaneous Maximum - 22 May 1927, 8,730 cfs. Revisions: Data to 1950 inclusive were reviewed in co-operation with the United States Geological Survey and revised data are available upon application to the District Engineer at Calgary, for address see page 8. Remarks: Records excellent during open-water periods and fair during ice periods. This is one of a number of stations which are maintained jointly by Canada and the United States. Prior to 1920, records were obtained by Canada only. Since July 1917, flows during the irrigation seasons have been augmented by water diverted into the North Branch of this stream from the St. Mary River via the United States St. Mary Canal.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	71	227	48	42	20	113	1,030b	479	724	706	663	615
2.....	66	137	64	42	22	97	1,800	490	724	700	675	609
3.....	66	89	69	41	23	126	1,230	502	718	706	651	621
4.....	64b	76	64	39	24	81	1,290	519	742	693	645	627
5.....	59b	62	57	37	24	71	1,810	566	754	693	627	621
6.....	55b	57	55	36	27	71	1,220	571	822	700	621	615
7.....	64b	74	53	36	31	48	950	583	822	718	621	615
8.....	66	79	51	36	30	53	1,020	625	791	700	615	615
9.....	69	53	48	34	27	44	1,320	649	791	706	621	609
10.....	66	64	48	36	20	23	1,340	679	791	724	621	603
11.....	66	79	51	36	9	20	1,210	710	779	767	621	591
12.....	64	76	46	36	41	42	1,190	741	865	779	627	585
13.....	64	69	44	36	31	33	1,240	905	859	742	621	580
14.....	64	86	48	39	30	18	1,270	1,040	884	718	621	562
15.....	69	74	48	33	29	27	990	953	859	706	621	515
16.....	69	69	48	27	44	31	637	853	785	693	615	469
17.....	62	84	48	26	34	31	485	791	767	675	609	407
18.....	64	97	44	26	25	39	418	760	779	669	621	319
19.....	74	113	46	27	24	44	363	742	760	663	621	271
20.....	76	86	48	34	20	48	319	730	810	657	615	199
21.....	76	94	46	37	20	46	283	730	928	651	615	136
22.....	41b	106	42	33	24	49	272	730	940	551	609	95
23.....	41	92	44	31	33	53	262	730	828	651	627	86
24.....	57	84	46	29	207	59	247	724	767	657	627	78
25.....	69	81	48	27	252	66	222	724	724	651	621	64
26.....	66	71	51	27	336	92	202	718	712	663	621	64
27.....	66	59	49	26	116	110	232	718	712	663	621	62
28.....	62	53	48	25	103	169	352	706	724	675	639	64
29.....	74	44	46	22	-	412	368	700	718	724	645	62
30.....	106	49	48	20	-	542	396	687	700	687	627	57
31.....	92	-	44	20	-	649	-	700	-	669	621	-
Mean	66.7	82.8	49.7	32.1	58.1	107	799	702	786	692	627	381
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	4,100	4,930	3,050	1,980	3,230	6,560	47,540	43,150	46,770	42,560	38,530	22,640

The Year..... Discharge: Daily - Maximum 5 April, 1,810
 - Minimum 11 February, 9
 Instantaneous Maximum 4 a.m., 2 April 2,190
 Mean 366
 Runoff: Acre-feet 265,000

b - Ice conditions 22 October to 1 April and as indicated.

MILK RIVER AT EASTERN CROSSING - STATION No. 11AA_{0.2}

(International Gauging Station)

Location: Lat. 49° 00' 00", long. 110° 35' 30", in NE. 1/4 sec. 6, tp. 37 N., rge. 9 E., Montana, about four hundred feet south of International Boundary and about twelve miles southeast of Comrey, Alberta. Drainage Area: 2,514 square miles. Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: Periods of varying length 1909 to date. Prior to 1917 records were published under title "at Spencer's Lower Ranche". Early records obtained by manual or recording gauges in the vicinity. Extremes Recorded: Daily - Maximum, 23 May 1927, 7,450 cfs, Minimum, Nil at various times; Instantaneous Maximum - 2 a.m., 31 March 1952, 9,530 cfs (A greater flow may have occurred during ice condition on 28 March 1952). Revisions: Data to 1950 inclusive were reviewed in co-operation with the United States Geological Survey and revised data are available upon application to the District Engineer at Calgary, for address see page 8. Remarks: Records good during open-water periods and fair during ice period. This is one of a number of stations which are maintained jointly by the United States and Canada. Prior to 1913, records were obtained by Canada only. Since July 1917, flows during the irrigation seasons have been augmented by water diverted from the St. Mary River via the United States St. Mary Canal.

Daily Discharge in Cubic Feet per Second for Water Year 1957-58

Day	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
1.....	143	148	-	-	-	20b	2,910	342	729	722	662	580
2.....	138	177	-	-	-	15	3,310	358	715	687	644	575
3.....	134	202	-	-	-	15x	2,770	403	729	674	626	565
4.....	132e	266	-	-	-	30	2,410	455	757	687	650	570
5.....	130e	250	-	-	-	350x	1,950	468	736	674	626	580
6.....	128e	171	-	-	-	150	2,320	473	729	680	610	580
7.....	126e	-	-	-	-	100	1,540	511	750	668	610e	570
8.....	126	-	-	-	-	65x	1,140	527	806	668	609e	570
9.....	110	-	-	-	-	80x	1,040e	541	883	694	608e	560
10.....	118	-	-	-	-	60	1,140	570	855	680	607e	560
11.....	113	-	-	-	-	25x	1,440	600	792	674	606e	555
12.....	105	-	-	-	-	55x	1,220	687	792	687	605	550
13.....	98	-	-	-	-	50	1,240	799	792	771	595	546
14.....	94	-	-	-	-	50x	1,170	785	876	806	610	565
15.....	87	-	-	-	-	40	1,310	944	876	750	605	541
16.....	82	-	-	-	-	30	1,290	1,040	918	722	600	526
17.....	81	-	-	-	-	25x	980e	911	855	722	595	478e
18.....	102	-	-	-	-	20x	668	806	806	701	590	431e
19.....	118	-	-	-	-	20	536	764	827	687	590	383e
20.....	118	-	-	-	-	25	492e	729	792	674	595	336e
21.....	105	-	-	-	-	25x	448e	722	778	668	590	288
22.....	98	-	-	-	-	30	404e	694	827	662	585	266
23.....	90	-	-	-	-	35x	360e	687	962	644	585	238
24.....	90	-	-	-	-	45	317	674	948	638	590	208
25.....	90	-	-	-	-	60	307	668	884e	626	585	174
26.....	90	-	-	-	-	110x	291	662	821e	632	580	146
27.....	132	-	-	-	-	380	281	650	757e	650	575	122
28.....	141	-	-	-	-	580	266	668	694	656	575	111
29.....	158	-	-	-	-	585	250e	656	729	668	595	100
30.....	223	-	-	-	-	1,290	272	662	694	662	600	97
31.....	216	-	-	-	-	1,910b	-	662	-	708	595	-
Mean	120	-	-	-	-	202	1,136	649	804	685	603	412
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	7,370	-	-	-	-	12,450	67,580	39,900	47,820	42,130	37,090	24,540

The Period..... Discharge: Daily - Maximum 2 April, 3,310
 (245 days) - Minimum 2 and 3 March, 15
 Instantaneous Maximum 5 a.m., 2 April, 3,600
 Mean 574
 Runoff: Acre-feet 278,900

b - Ice conditions 1 to 31 March.

e - Estimated.

x - Staff gauge readings.

STATION No. 11AA_{0.3}

(International Gauging Station)

Location: Lat. 48° 59', long. 113° 03', in SW. 1/4 sec. 16, tp. 37 N., rge. 11 W., Montana, about four miles south of International Boundary and one and one-half miles above mouth of United States St. Mary Canal. Drainage Area: 62 square miles. Gauge: Recording. Measurement of Discharge: From bridge or by wading. Period of Record: Part-year records 1911, 1912 and 1919 to date. Earlier records were collected near the present site by the United States Geological Survey, by manual gauges at Dubray's Ranch in 1911 and 1912 (published under title "near Browning"), and at Martin's Ranch in 1919 and 1920 (not published). Extremes Recorded: Daily - Maximum, 22 April 1953, 1,320 cfs, Minimum, 17 September 1940, 1.7 cfs; Instantaneous Maximum - about 10 p.m., 22 April 1953, 2,120 cfs. Revisions: Data to 1950 inclusive were reviewed in co-operation with the United States Geological Survey and revised data are available upon application to the District Engineer at Calgary, for address see page 8. Remarks: Records excellent. This is one of a number of stations which are maintained jointly by the United States and Canada. Records from this station are used in determining the natural flow of the stream at the International Boundary during periods of operation of the United States St. Mary Canal.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	70e	33.4	20.8	17.8	15.9	15.0	17.8	-	-
2.....	-	-	-		31.3	20.3	18.8	15.9	15.4	17.3	-	-
3.....	-	-	-		29.2	19.3	19.8	15.9	18.8	-	-	-
4.....	-	-	-		27.3	24.2	18.8	15.9	16.8	-	-	-
5.....	-	-	-		26.6	23.0	18.8	15.9	15.9	-	-	-
6.....	-	-	-	98	25.4	19.3	22.4	15.9	15.9	-	-	-
7.....	-	-	-		25.4	21.3	22.4	15.4	15.4	-	-	-
8.....	-	-	-		24.8	23.6	20.3	15.0	15.0	-	-	-
9.....	-	-	-		24.2	27.9	21.9	15.4	15.4	-	-	-
10.....	-	-	-		23.6	26.0	21.3	14.5	15.4	-	-	-
11.....	-	-	-	119	23.0	24.2	19.3	14.5	15.0	-	-	-
12.....	-	-	-	180	45.5	27.9	18.8	15.9	15.4	-	-	-
13.....	-	-	-	366	65	24.2	23.0	14.5	17.3	-	-	-
14.....	-	-	-	292	34.8	20.3	23.0	14.1	16.3	-	-	-
15.....	-	-	-	83	27.9	19.3	21.3	14.5	15.9	-	-	-
16.....	-	-	-	51	24.8	22.4	19.3	14.1	16.3	-	-	-
17.....	-	-	-	40.6	23.6	19.3	18.8	14.1	15.9	-	-	-
18.....	-	-	-	38.3	23.0	20.8	17.8	14.1	15.4	-	-	-
19.....	-	-	-	32.7	21.9	33.9	17.3	15.9	16.3	-	-	-
20.....	-	-	-	31.3	21.3	39.1	17.3	16.8	16.3	-	-	-
21.....	-	-	-	29.9	20.8	24.8	16.8	15.9	16.3	-	-	-
22.....	-	-	-	29.9	24.2	23.0	16.3	15.9	15.9	-	-	-
23.....	-	-	-	30.6	21.3	20.3	19.3	16.3	19.8	-	-	-
24.....	-	-	-	29.2	20.3	19.3	19.3	15.9	21.3	-	-	-
25.....	-	-	-	27.3	19.3	18.3	16.8	15.4	19.8	-	-	-
26.....	-	-	-	27.9	18.3	17.8	19.3	14.5	17.8	-	-	-
27.....	-	-	-	28.6	17.8	18.3	19.3	14.5	17.3	-	-	-
28.....	-	-	-	28.6	17.8	19.3	39.3	16.8	16.8	-	-	-
29.....	-	-	-	29.9	17.3	17.3	19.3	16.8	16.8	-	-	-
30.....	-	-	-	29.9	17.3	18.3	19.3	15.9	17.3	-	-	-
31.....	-	-	-	-	18.8	-	17.3	15.4	-	-	-	-
Mean	-	-	-	75.1	25.7	22.5	20.0	15.4	16.6	-	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	-	4,470	1,580	1,340	1,230	947	988	-	-	-

The Period..... Discharge: Daily - Maximum 13 April, 366
 (183 days) - Minimum 14, 16, 17 and 18 August, 14.1

Instantaneous Maximum 3 a.m., 14 April, 915

Mean 29.1

Runoff: Acre-feet 10,560

e - Estimated.

(International Gauging Station)

Location: Lat. 49° 02', long. 112° 58', in NE. 1/4 sec. 11, tp. 1, rge. 23, W. 4th Mer., Alberta, two and one-half miles east of Whiskey Gap, two miles north of International Boundary and about thirty miles above confluence with South Branch. Drainage Area: 101 square miles. Gauge: Recording. Measurement of Discharge: From bridge or by wading. Period of Record: Periods of varying length 1909 to date. Prior to 1913, records were obtained from a staff gauge located two miles downstream from present site. Prior to 1917, records were published under the title, "at Peter's Ranch". Extremes Recorded: Daily - Maximum, 24 June 1951, 1,650 cfs (estimated), Minimum, 1 and 2 March 1940, Nil; Instantaneous Maximum - 7 am. to 12 noon, 17 June 1948, 2,950 cfs. Revisions: Data to 1950 inclusive were reviewed in co-operation with the United States Geological Survey and revised data are available upon application to the District Engineer at Calgary, for address see page 8. Remarks: Records excellent during open-water period and fair during ice period. This is one of a number of stations which are maintained jointly by Canada and the United States. Prior to 1913, records were obtained by Canada only. Since 1917, flows during the irrigation seasons have been augmented by water delivered to this stream, two miles above the station, from the St. Mary River via the United States St. Mary Canal.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	18	90	365	663	637	647	627	21.9	-	-
2.....	-	-	19	117	365	652	637	642	622	19.2	-	-
3.....	-	-	18	137	392	658	637	647	632	17.8	-	-
4.....	-	-	22	153	432	673	632	642	622	17.8	-	-
5.....	-	-	14	74	448	652	627	637	617	17.8	-	-
6.....	-	-	11	70	479	647	632	642	617	17.8	-	-
7.....	-	-	22	92b	525	658	627	642	617	18.5	-	-
8.....	-	-	24	176	563	658	617	642	607	19.2	-	-
9.....	-	-	19	248	592	668	637	642	602	21.9	-	-
10.....	-	-	18	278	617	668	647	637	587	21.0	-	-
11.....	-	-	18	358	632	663	647	637	582	21.0	-	-
12.....	-	-	12	437	688	673	647	642	572	21.0	-	-
13.....	-	-	13	493	714	658	652	642	548	19.2	-	-
14.....	-	-	14	341	658	652	658	642	506	19.2	-	-
15.....	-	-	15	108	652	647	652	642	448	19.2	-	-
16.....	-	-	14	62	647	647	647	642	373	19.2	-	-
17.....	-	-	16	52	637	637	642	637	300	18.5	-	-
18.....	-	-	11	47.5	637	642	642	637	230	17.8	-	-
19.....	-	-	11	40.6	637	683	642	632	137	17.8	-	-
20.....	-	51x	11	39.6	642	678	642	637	60	20.1	-	-
21.....	-	85	13	38.6	642	642	637	632	39.6	20.1	-	-
22.....	-	119x	12	37.6	647	637	637	632	30.1	20.1	-	-
23.....	-	101x	12	36.7	642	627	647	632	33.8	19.2	-	-
24.....	-	45x	22	33.8	642	627	642	632	33.8	19.2	-	-
25.....	-	38	22	32.0	647	627	642	627	29.1	19.2	-	-
26.....	-	30x	25	155	642	637	652	627	24.6	19.2	-	-
27.....	-	20x	33	194	642	647	652	622	23.7	19.2	-	-
28.....	-	20	55	211	647	663	673	632	21.9	19.2	-	-
29.....	-	-	56	272	647	637	647	632	21.0	19.2	-	-
30.....	-	-	74	348	652	642	652	627	21.0	19.2	-	-
31.....	-	-	78	-	658	-	652	627	-	19.2x	-	-
Mean	-	-	23.3	159	595	652	643	637	339	19.3	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	1,430	9,470	36,560	38,800	39,540	39,140	20,200	1,190	-	-

The Period..... Discharge: Daily - Maximum 13 May, 714
 (245 days) - Minimum 6, 18 to 20 March, 11
 Instantaneous Maximum 9 p.m., 12 April, 842
 Mean 383
 Runoff: Acre-feet 186,300

b - Ice conditions 20 February to 7 April.

x - Staff gauge readings.

(International Gauging Station)

Location: Lat. 49° 00' 50", long. 112° 32' 20", in NW, 1/4 sec. 6, tp. 1, rge. 19, W. 4th Mer., Alberta; three-quarters of a mile north of the International Boundary and about twelve miles above confluence with North Branch and twenty-four miles southwest of Milk River. Drainage Area: 433 square miles. Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: Mainly March to October 1931 to date. The recorder was moved downstream five hundred feet in August 1948. Extremes Recorded: Daily - Maximum, 18 June 1948, 4,470 cfs, Minimum, Nil at various times; Instantaneous Maximum - 5 a.m., 18 June 1948, 4,750 cfs. Revisions: Data to 1950 inclusive were reviewed in co-operation with the United States Geological Survey and revised data are available upon application to the District Engineer at Calgary, for address see page 8. Remarks: Records excellent during open-water period and fair during ice period. This is one of a number of stations which are maintained jointly by Canada and the United States. Records were collected by United States Geological Survey from 1905 to 1912 and by Canada and United States from 1913 to 1930 at a station twenty-seven miles upstream, called "at Croft's Ranch" prior to 1917 and "near International Boundary" thereafter. That station was above the mouth of Kennedy Coulee and records are not equivalent to those obtained at present site. Discharge affected by a few minor irrigation diversions upstream.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	43	482	86	36.3	54	72	4.0	22.1	-	-
2.....	-	-	35	635b	94	40.3	48.9	48.9	5.1	22.1	-	-
3.....	-	-	35	398	99	70	47.4	33.6	8.4	21.1	-	-
4.....	-	-	34	410	101	70	48.9	25.1	7.1	20.2	-	-
5.....	-	-	28	404	99	133	68	20.2	7.1	18.5	-	-
6.....	-	-	24	285	97	153	68	16.8	7.5	17.6	-	-
7.....	-	-	14	248	94	103	67	14.6	6.6	16.1	-	-
8.....	-	-	8	460	90	84	82	13e	8.0	16.8	-	-
9.....	-	-	16	750	90	88	92	12e	7.5	18.5	-	-
10.....	-	-	8x	547	88	86	113	11e	6.6	17.6	-	-
11.....	-	-	8	465	88	155	135	10e	5.8	18.5	-	-
12.....	-	-	9	408	99	182	111	14.9x	4.0	26.1	-	-
13.....	-	-	9	428	239	194	77	8.9x	3.4	29.7	-	-
14.....	-	-	10	428	326	232	65	7.5	3.4	30.9	-	-
15.....	-	-	10	281	189	145	58	6.6	3.4	27.2	-	-
16.....	-	-	11	173	130	109	57	6.2	2.9	25.1	-	-
17.....	-	-	11	153	103	99	55	5.4	7.3	22.1	-	-
18.....	-	-	12	138	92	99	44.5	5.1	10.9	21.1	-	-
19.....	-	-	12	118	84	101	39.0	4.7	9.3	20.2	-	-
20.....	-	-	13	105	77	178	34.9	4.0	8.9	20.2	-	-
21.....	-	-	14	99	70	335	29.7	3.7	8.0	22.1	-	-
22.....	-	-	14	115	70	193	26.1	3.1	7.5	25.1	-	-
23.....	-	-	14	105	65	132	33.6	5.4	12.6	30.9	-	-
24.....	-	-	16	96	65	101	30.9	10.3	21.1	28.4	-	-
25.....	-	-	18	88	58	88	27.2	11.4	20.2	26.1	-	-
26.....	-	-	24	84	55	75	34.9	12.6	24.0	25.1	-	-
27.....	-	34b	106	86	50	67	33.6	10.9	29.7	23.0	-	-
28.....	-	37	115	92	43.1	60	43.1	10.3	29.7	22.1	-	-
29.....	-	-	168	90	37.6	55	57	8.9	27.2	24.0	-	-
30.....	-	-	227	92	34.9	57	46.0	7.5	23.0	23.0	-	-
31.....	-	-	305	-	34.9	-	48.9	5.8	-	23.0x	-	-
Mean	-	-	44.2	275	95.1	117	57.3	13.9	11.0	22.7	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	2,720	16,390	5,850	6,980	3,520	854	655	1,400	-	-

The Period..... Discharge: Daily - Maximum 9 April, 750
 (245 days) - Minimum 16 September, 2.9
 Instantaneous Maximum 8 a.m., 9 April, 974
 Mean 79.0
 Runoff: Acre-feet 38,370

b - Ice conditions 27 February to 2 April.

e - Estimated.

x - Wire-weight gauge readings.

(International Gauging Station)

Location: Lat. 48° 57', long. 107° 52', in NW. 1/4 sec. 24, tp. 37 N., rge. 29 E., Montana, about one hundred yards below junction with Cottonwood Coulee, six miles downstream from International Boundary and fourteen miles south of Orkney, Saskatchewan. Gauge: Recording Measurement of Discharge: From cableway, by wading or by V-notch weir. Period of Record: Mainly March to October, 1927 to date. Extremes Recorded: Daily - Maximum, 14 April 1952, 2,550 cfs, Minimum - Nil at various times; Instantaneous Maximum - 2 a.m., 14 April 1952, 3,500 cfs. Revisions: Data to 1950 inclusive were reviewed in co-operation with the United States Geological Survey and revised data are available upon application to the District Engineer at Calgary, for address see page 8. The July 1955 mean discharge has been corrected to 25.8 cfs. Remarks: Records excellent. This is one of a number of stations which are maintained jointly by the United States and Canada.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	0.0	119	0.3	0.1	0.0	0.0	Nil	0.0	-	-
2.....	-	-	0.0	46.7	0.4	0.1	0.0	0.0	"	0.0	-	-
3.....	-	-	0.0	15.9	0.3	0.1	0.0	0.0	"	0.0	-	-
4.....	-	-	0.0	4.0	0.3	0.1	0.1	Nil	"	0.0	-	-
5.....	-	-	0.0	3.7	0.2	0.1	0.1	"	"	0.0	-	-
6.....	-	-	0.0	2.5	0.2	0.0	0.1	"	"	0.0	-	-
7.....	-	-	0.0	1.8	0.2	0.0	0.0	"	"	0.0	-	-
8.....	-	-	0.0	1.3	0.2	0.0	0.0	"	"	0.0	-	-
9.....	-	-	0.0	1.0	0.1	0.1	0.0	"	"	0.0	-	-
10.....	-	-	0.0	0.9	0.1	0.0	0.0	"	"	0.0	-	-
11.....	-	-	0.0	0.9	0.1	0.0	0.0	"	"	0.0	-	-
12.....	-	-	0.0	0.8	0.1	0.0	0.0	"	"	0.0	-	-
13.....	-	-	0.0	0.7	0.1	0.0	0.0	"	"	0.0	-	-
14.....	-	-	0.0	0.7	0.1	0.0	0.0	"	"	0.0	-	-
15.....	-	-	0.0	0.6	0.1	0.0	0.0	"	"	0.0	-	-
16.....	-	-	0.0	0.6	0.1	0.0	0.0	"	"	0.0	-	-
17.....	-	-	0.0	0.6	0.1	0.0	0.0	"	"	0.0	-	-
18.....	-	-	0.0	0.7	0.0	0.0	0.0	"	"	0.0	-	-
19.....	-	-	0.0	0.6	0.0	0.0	0.0	"	"	0.0	-	-
20.....	-	-	0.0	0.6	0.0	0.0	0.0	"	"	0.1	-	-
21.....	-	-	0.0	0.8	0.0	0.0	0.0	"	"	0.1	-	-
22.....	-	-	0.0	0.8	0.0	0.0	0.0	"	"	0.1	-	-
23.....	-	-	0.0	0.7	0.0	0.0	0.0	"	0.0	0.1	-	-
24.....	-	-	0.0	0.6	0.0	0.0	0.0	"	0.0	0.1	-	-
25.....	-	-	6.4	0.5	0.0	0.0	0.0	"	0.0	0.0	-	-
26.....	-	-	36.2	0.5	0.0	0.0	0.0	"	0.0	0.0	-	-
27.....	-	-	56	0.4	0.0	0.0	0.0	"	0.0	0.0	-	-
28.....	-	-	193	0.4	0.0	0.0	0.0	"	0.0	0.0	-	-
29.....	-	-	295	0.4	0.0	0.0	0.0	"	0.0	0.0	-	-
30.....	-	-	215	0.3	0.0	0.0	0.0	"	0.0	0.0	-	-
31.....	-	-	172	-	0.0	-	0.0	"	-	0.0	-	-
Mean	-	-	31.4	6.97	0.10	0.02	0.01	0.00	0.00	0.02	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	1,930	415	6.0	1.2	0.6	0.0	0.0	1.0	-	-

The Period..... Discharge: Daily - Maximum 29 March, 295
 (245 days) - Minimum at various times, Nil
 Instantaneous Maximum 5 a.m., 29 March, 503
 Mean 4.84
 Runoff: Acre-feet 2,350

LODGE CREEK AT ALBERTA BOUNDARY - STATION No. 11AB₈₂

Location: Lat. 49° 13', long. 110° 00', in NW. 1/4 sec. 16, tp. 3, rge. 30, W. 3rd Mer., Saskatchewan, about one mile downstream from Alberta-Saskatchewan Boundary and nine miles west of Govenlock. Drainage Area: 342 square miles. Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: March to October, 1951 to date. Extremes Recorded: Daily - Maximum, 16 April 1952, 3,870 cfs, Minimum, Nil at various times; Instantaneous Maximum - 10 a.m., 16 April 1952, 4,840 cfs. Remarks: Records fair. Discharge at this station is affected by minor diversions for irrigation purposes. From 28 July to 31 October 1958, about 932 acre-feet was diverted from Middle Creek Reservoir via Bedford Slough into Lodge Creek above this station.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	2b	899	7.1	0.1	0.1	21.1	0.6	Nil	-	-
2.....	-	-	2	927b	8.8	0.3	0.0	12.0	0.5	"	-	-
3.....	-	-	2	1,190	7.9	0.2	0.1	7.9	0.4	"	-	-
4.....	-	-	1	2,040	9.0	0.0	0.0	10.0	0.2	"	-	-
5.....	-	-	1	2,410	7.9	Nil	0.0	10.6	0.2	"	-	-
6.....	-	-	1	1,070	6.8	"	Nil	16.5	0.1	"	-	-
7.....	-	-	1	557	6.4	"	0.0	20.6	0.1	"	-	-
8.....	-	-	0.5	595	5.6	"	0.1	21.1	0.0	"	-	-
9.....	-	-	0.5	352	5.6	"	0.1	20.6	Nil	"	-	-
10.....	-	-	0.5	256	4.5	"	0.1	20.1	"	"	-	-
11.....	-	-	0.5	208	3.8	"	0.0	19.2	"	"	-	-
12.....	-	-	0.5	142	3.5	0.0	0.0	19.2	"	"	-	-
13.....	-	-	0.5	120	3.4	0.1	Nil	17.8	"	"	-	-
14.....	-	-	0.5	107	4.0	0.1	"	16.9	"	"	-	-
15.....	-	-	0.5	88	4.8	0.2	"	15.6	"	0.0	-	-
16.....	-	-	0.5	65	5.2	0.2	"	15.2	"	0.0	-	-
17.....	-	-	0.5	43.8	4.7	0.3	"	13.9	"	Nil	-	-
18.....	-	-	0.5	31.1	5.4	0.3	"	12.8	"	"	-	-
19.....	-	-	0.5	24.6	5.8	0.4	"	12.0	"	"	-	-
20.....	-	-	0.5	21.1	4.8	0.4	"	11.7	"	0.2	-	-
21.....	-	-	0.5	17.3	4.5	0.5	"	10.0	"	0.1	-	-
22.....	-	-	0.5	15.6	4.0	0.5	"	10.0	"	0.1	-	-
23.....	-	-	0.5	12.8	3.1	0.5	"	9.0	0.0	0.1	-	-
24.....	-	-	0.5	11.4	2.8	0.4	"	8.5	0.0	0.0	-	-
25.....	-	-	0.5	10.6	2.4	0.4	"	7.6	Nil	Nil	-	-
26.....	-	-	1	9.6	1.8	0.3	"	6.6	"	"	-	-
27.....	-	-	2	8.8	1.5	0.3	"	5.6	"	"	-	-
28.....	-	-	5	7.6	1.2	0.2	9.4	5.0	"	"	-	-
29.....	-	-	45	7.4	0.8	0.1	22.0	3.2	"	"	-	-
30.....	-	-	116	7.1	0.2	0.0	25.6	0.7	"	0.0	-	-
31.....	-	-	283	-	0.1	-	28.9	0.4	-	0.0e	-	-
Mean	-	-	15.2	375	4.43	0.19	2.79	12.3	0.07	0.02	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	934	22,320	273	12	171	756	4.2	1.0	-	-

The Period..... Discharge: Daily - Maximum 5 April, 2,410
 (245 days) - Minimum at various times, Nil
 Instantaneous Maximum 9 a.m., 5 April, 2,670
 Mean 50.4
 Runoff: Acre-feet 24,470

b - Ice conditions 1 March to 2 April. e - Estimated.

(International Gauging Station)

Location: Lat. 49° 00' 20", long. 109° 43' 05", in SW. 1/4 sec. 5, tp. 1, rge. 28, W. 3rd Mer., Saskatchewan, about one-half mile upstream from International Boundary, one-quarter mile below confluence with McRae Coulee and twenty miles south of Govenlock. Drainage Area: 855 square miles. Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: March to October, 1952 to date. Extremes Recorded: Daily - Maximum, 14 April 1952, 4,930 cfs, Minimum, Nil at various times; Instantaneous Maximum - 5 p.m., 13 April 1952, 5,570 cfs. Revisions: 1955, W.R.P. 121. Remarks: Records excellent during open-water period and fair during ice period. This is one of a number of stations which are maintained jointly by Canada and the United States. Discharge is affected by several irrigation schemes on this stream and its tributaries above this station. During the April 1952 flood, discharge was augmented by overflow from the Battle Creek basin. Records from April 1910 to October 1951 were collected at station about two miles upstream, above confluence with McRae Coulee and were published under the title "Lodge Creek at International Boundary".

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	2b	1,720	11.0	1.8	0.0	Nil	Nil	Nil	-	-
2.....	-	-	2	1,580	11.0	1.8	0.0	"	"	"	-	-
3.....	-	-	2	1,410	10.2	1.6	0.0	"	"	"	-	-
4.....	-	-	2	1,660	9.8	1.9	0.0	"	"	"	-	-
5.....	-	-	1	2,420	9.8	1.9	0.0	"	"	"	-	-
6.....	-	-	1	2,040b	9.1	1.8	0.0	"	"	"	-	-
7.....	-	-	1	882	9.8	1.6	0.0	"	"	"	-	-
8.....	-	-	1	626	9.1	1.4	0.0	"	"	"	-	-
9.....	-	-	1	576	8.0	1.4	0.0	"	"	"	-	-
10.....	-	-	1	299	7.4	1.3	0.0	"	"	"	-	-
11.....	-	-	1	259	6.1	1.2	0.0	"	"	"	-	-
12.....	-	-	1	204	5.3	1.0	0.0	"	"	"	-	-
13.....	-	-	1	145	5.3	0.7	0.0	"	"	"	-	-
14.....	-	-	1	126	4.4	0.7	0.0	"	"	"	-	-
15.....	-	-	1	147	4.2	0.7	0.0	"	"	"	-	-
16.....	-	-	1	98	3.9	0.6	0.0	"	"	"	-	-
17.....	-	-	1	61	3.6	2.0	0.0	"	"	"	-	-
18.....	-	-	1	77	3.2	2.7	0.0	"	"	"	-	-
19.....	-	-	1	49.2	3.1	2.4	0.0	"	"	"	-	-
20.....	-	-	2	36.4	2.9	2.1	Nil	"	"	"	-	-
21.....	-	-	2	31.1	2.9	1.9	"	"	"	"	-	-
22.....	-	-	2	29.8	2.7	1.4	"	"	"	"	-	-
23.....	-	-	2	25.3	2.6	1.2	"	"	"	"	-	-
24.....	-	-	2	22.7	2.5	0.9	"	"	"	"	-	-
25.....	-	-	3	20.5	2.3	0.4	"	"	"	"	-	-
26.....	-	-	4	17.9	1.9	0.2	"	"	"	"	-	-
27.....	-	-	20	15.8	1.6	0.0	"	"	"	"	-	-
28.....	-	-	140	14.9	1.5	0.0	"	"	"	"	-	-
29.....	-	-	475	13.4	1.4	0.0	"	"	"	"	-	-
30.....	-	-	620	12.5	1.2	0.0	"	"	"	"	-	-
31.....	-	-	1,090	-	1.2	-	"	"	-	"	-	-
Mean	-	-	76.9	487	5.13	1.22	0.00	Nil	Nil	Nil	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	4,730	29,000	315	73	0.0	Nil	Nil	Nil	-	-

The Period..... Discharge: Daily - Maximum 5 April, 2,420
 (245 days) - Minimum at various times, Nil
 Instantaneous Maximum 11 p.m., 5 April, 2,720
 Mean 70.2
 Runoff: Acre-feet 34,120

b - Ice conditions 1 March to 6 April.

Location: Lat. 49° 25' 20", long. 110° 02' 45", in SW. 1/4 sec. 35, tp. 5, rge. 1, W. 4th Mer., Alberta, about one mile above Middle Creek Reservoir and thirty miles northwest by road from Senate, Saskatchewan. Drainage Area: 116 square miles. Gauge: Recording. Measurement of Discharge: From bridge or by wading. Period of Record: Mainly March to October, 1910 to 1915 and 1949 to date. Records from 1910 to 1915 were published under the title "at MacKinnon's Ranch". Extremes Recorded: Daily - Maximum, 15 April 1952, 2,560 cfs, Minimum, Nil at various times; Instantaneous Maximum - 8 p.m., 15 April 1952, 4,980 cfs (slope-area determination by P.F.R.A., Hydrology Division). Revisions: June 1914 mean discharge has been corrected to 0.49 cfs. Remarks: Records fair. All discharge at this station has been stored in Middle Creek Reservoir since its construction in 1937. Some of this storage is released from time to time to Middle Creek or, since 1952, to Lodge Creek via a chain of lakes and sloughs south and west of the reservoir. Discharge is affected by minor irrigation diversions and storage upstream.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	2.0b	375	3.5	0.7	0.3	0.3	0.2	0.4	-	-
2.....	-	-	1.0	318	3.2	0.6	0.3	0.3	0.2	0.4	-	-
3.....	-	-	0.5	198	3.0	0.6	0.3	0.4	0.2	0.4	-	-
4.....	-	-	0.5	194	2.1	0.6	0.3	0.4	0.3	0.4	-	-
5.....	-	-	0.4	148	2.7	0.4	0.3	0.5	0.3	0.4	-	-
6.....	-	-	0.4	86	2.5	0.4	0.3	0.6	0.3	0.4	-	-
7.....	-	-	0.3	55	2.3	0.4	0.3	0.7	0.3	0.3	-	-
8.....	-	-	0.3	49.6	2.0	0.4	0.3	0.8	0.3	0.3	-	-
9.....	-	-	0.3	47.4	1.5	0.4	0.3	0.7	0.3	0.3	-	-
10.....	-	-	0.3	43.6	1.7	0.4	0.3	0.7	0.3	0.3	-	-
11.....	-	-	0.3	35.7	1.8	0.4	0.3	0.7	0.3	0.3	-	-
12.....	-	-	0.3	27.8	1.1	0.4	0.3	0.8	0.3	0.3	-	-
13.....	-	-	0.3	21.4	0.9	0.4	0.3	0.8	0.3	0.3	-	-
14.....	-	-	0.3	15.9	1.2	0.4	0.3	0.7	0.3	0.3	-	-
15.....	-	-	0.3	11.1	1.2	0.4	0.3	0.5	0.3	0.3	-	-
16.....	-	-	0.4	7.7	0.9	0.4	0.3	0.5	0.3	0.3	-	-
17.....	-	-	0.4	8.7	0.6	0.4	0.3	0.4	0.3	0.3	-	-
18.....	-	-	0.4	4.8	0.7	0.4	0.3	0.3	0.3	0.3	-	-
19.....	-	-	0.4	5.8	0.9	0.4	0.3	0.4	0.3	0.3	-	-
20.....	-	-	0.4	6.4	1.0	0.4	0.3	0.5	0.3	0.3	-	-
21.....	-	-	0.5	6.4	0.9	0.4	0.3	0.4	0.3	0.2	-	-
22.....	-	-	0.5	6.4	0.9	0.3	0.3	0.3	0.3	0.2	-	-
23.....	-	-	0.5	5.8	0.5	0.3	0.3	0.2	0.4	0.2	-	-
24.....	-	-	0.5	5.7	0.6	0.3	0.3	0.2	0.4	0.2	-	-
25.....	-	-	0.5	5.7	0.4	0.3	0.3	0.2	0.4	0.2	-	-
26.....	-	-	0.5	5.1	0.3	0.3	0.3	0.2	0.4	0.2	-	-
27.....	-	-	1.0	3.2	0.4	0.3	0.3	0.2	0.4	0.2	-	-
28.....	-	-	2.0	3.2	0.3	0.3	0.3	0.2	0.4	0.2	-	-
29.....	-	-	5.0	3.1	0.3	0.3	0.3	0.2	0.4	0.2	-	-
30.....	-	-	28.6	3.1	0.5	0.3	0.3	0.2	0.4	0.2	-	-
31.....	-	-	238b	-	0.7	-	0.3	0.2	-	0.2	-	-
Mean	-	-	9.26	56.9	1.31	0.40	0.30	0.44	0.32	0.28	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	569	3,390	81	24	18	27	19	17	-	-

The Period..... Discharge: Daily - Maximum 1 April, 375
 (245 days) - Minimum at various times, 0.2
 Instantaneous Maximum 6 p.m., 1 April, 434
 Mean 8.52
 Runoff: Acre-feet 4,140

b - Ice conditions 1 to 31 March.

Source: Lodge Creek. Location: Lat. 49° 09', long. 109° 55', in NW. 1/4 sec. 26, tp. 2, rge. 30, W. 3rd Mer., Saskatchewan, about one mile below headgate, five hundred feet below siphon and about thirteen miles southwest of Govenlock. Gauge: Recording. Measurement of Discharge: From footbridge or by wading. Period of Record: Irrigation seasons, 1915 to 1936 and 1950 to date. Records prior to 1950 obtained from staff gauges. Prior to 1922 records were collected in NW. 1/4, sec. 24 and from 1922 to 1929 in SW. 1/4, sec. 25 and published under title "M., M. M., and J. M. Spangler Ditch near Altawan". Records from 1930 to 1936 were collected in two branches of canal in S. 1/2 sec. 24 and published under titles "C. B. Spangler Ditch" and "M., M. M., and J. M. Spangler Ditch" respectively. Extremes Recorded: Daily - Maximum, 22 April 1950, 65 cfs, Instantaneous Maximum - 7 a.m., 30 August 1951, 86 cfs. Remarks: Records fair. The ditch was taken over and enlarged by the Province of Saskatchewan in 1949 and records since that time are not comparable with prior records collected on privately owned ditches in this scheme.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	Nil b	34.0	Nil	Nil	Nil	24.1	Nil	Nil	-	-
2.....	-	-	"	28.0	"	"	"	16.7	"	"	-	-
3.....	-	-	"	34.4	"	"	"	5.4	"	"	-	-
4.....	-	-	"	26.6	"	"	"	0.5	"	"	-	-
5.....	-	-	"	22.3	"	"	"	0.3	"	"	-	-
6.....	-	-	"	38.7	"	"	"	0.3	"	"	-	-
7.....	-	-	"	41.0	"	"	"	9.4	"	"	-	-
8.....	-	-	"	39.9	0.1	"	"	17.4	"	"	-	-
9.....	-	-	"	38.1	0.3	"	"	17.8	"	"	-	-
10.....	-	-	"	28.4	0.7	"	"	18.2	"	"	-	-
11.....	-	-	"	22.5	0.8	"	"	17.8	"	"	-	-
12.....	-	-	"	22.3	0.7	"	"	18.6	"	"	-	-
13.....	-	-	"	22.5	0.8	"	"	19.3	"	"	-	-
14.....	-	-	"	22.7	0.8	"	"	18.2	"	"	-	-
15.....	-	-	"	22.1	0.8	"	"	17.6	"	"	-	-
16.....	-	-	"	24.8	0.8	"	"	17.2	"	"	-	-
17.....	-	-	"	15.6	0.7	"	"	17.0	"	"	-	-
18.....	-	-	"	0.0	0.6	"	"	16.3	"	"	-	-
19.....	-	-	"	Nil	0.6	"	"	17.0	"	"	-	-
20.....	-	-	"	"	0.8	0.0	"	19.9	"	"	-	-
21.....	-	-	"	"	0.6	Nil	"	17.8	"	"	-	-
22.....	-	-	"	"	0.4	"	"	16.7	"	"	-	-
23.....	-	-	"	"	0.3	"	"	16.1	"	"	-	-
24.....	-	-	"	"	0.2	"	"	16.1	"	"	-	-
25.....	-	-	"	"	0.1	"	"	16.3	"	"	-	-
26.....	-	-	"	"	0.1	"	"	16.1	"	"	-	-
27.....	-	-	0.8	"	0.0	"	"	15.1	"	"	-	-
28.....	-	-	9.2	"	0.0	"	"	15.7	"	"	-	-
29.....	-	-	27.0	"	Nil	"	"	16.3	"	"	-	-
30.....	-	-	42.0b	"	"	"	11.2	7.0	"	"	-	-
31.....	-	-	49.5	-	"	-	22.7	0.2	-	"	-	-
Mean	-	-	4.15	16.1	0.33	0.00	1.09	14.3	Nil	Nil	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	255	960	20	0.0	67	877	Nil	Nil	-	-

The Period..... Discharge: Daily - Maximum 31 March, 49.5
 (245 days) Instantaneous Maximum 9 p.m., 30 March, 53
 Runoff: Acre-feet 2,180

b - Ice conditions 1 to 30 March.

Location: Lat. 49° 24', long. 109° 59', in NE. 1/4 sec. 21, tp. 5, rge. 30, W. 3rd Mer., Saskatchewan, on Alberta-Saskatchewan boundary about fourteen miles northwest of Govenlock. Gauge: Staff. Period of Record: Occasional observations in 1937 and 1939 to 1951; mainly March to October, 1952 to date. Extremes Recorded: Daily - Maximum, 13 April 1952, 3,354.06 feet (Contents, 23,080 acre-feet), Minimum, 26 October 1949, reservoir dry. Remarks: Elevations are referred to bench mark described as top of bolt at centre of west edge of top of gate well, elevation 3,355.04 feet (Reclamation Service datum). All published elevations are based on Reclamation Service datum. To convert to Geodetic Survey of Canada datum add 34.54 feet. Water is impounded on Middle Creek for use in minor irrigation projects downstream. Water may be spilled to a chain of sloughs south of the reservoir and thence returned to either Lodge Creek or Middle Creek. The entire available record to 1955 inclusive is published in W.R.P. 117.

Elevations in Feet and Contents in Acre-feet for Calendar Year 1958

Month	Elevation at End of Month	Contents at End of Month	Change in Contents During Month
January.....	-	-	-
February.....	3,347.48	14,910	-
March.....	3,348.78	16,510	+1,600
April.....	3,350.18	18,230	+1,720
May.....	3,348.80	16,530	-1,700
June.....	3,348.50	16,160	- 370
July.....	3,348.03	15,590	- 570
August.....	3,347.30	14,690	- 900
September.....	3,346.87	14,160	- 530
October.....	3,346.69	13,940	- 220
November.....	-	-	-
December.....	-	-	-
The Period.....	-	-	- 970

MISCELLANEOUS DISCHARGE MEASUREMENTS MADE IN LODGE CREEK TRIBUTARY BASIN

Date	Stream	Location	Discharge cfs
14 April 1958	Spangler Ditch extension to P.F.R.A. pasture	Sec. 32, tp. 1, rge. 29, W. 3rd Mer.	16.9

MISCELLANEOUS DIVERSIONS MADE IN LODGE CREEK TRIBUTARY BASIN
FOR THE YEAR 1958

Ditch Owner	Location	Diverting From	Approx. Acre- feet Diverted
Buchanan, H.	SW. 10-3-29-3	A Coulee	10
Griffiths, G.	SE. 29-3-30-3	A Coulee	38
Hagle, C. E.	SE. 35-4-29-3	A Coulee	10
Howe, J. W.	NE. 17-4-28-3	A Coulee	6
Jones, A. L.	SW. 35-4-29-3	A Coulee	10
Mitchell Ranching Co. Ltd.	22/25-5-30-3	Middle Creek	50
Patterson, R.	NE. 4-4-29-3	Middle Creek	22
Pedersen, L.	SW. 22-2-29-3	A Coulee.	18
	S. 1/2 22-2-29-3		
Reynolds, R. H.	NW. 36-4-29-3	A Coulee	3
Schafer, S. P.	NW. 3-4-28-3	A Coulee	6
Stokke, S.	SE. 20-2-29-3	Middle Creek	50
Trumpour, A. W.	NW. 24-3-29-3	Trumpour Coulee	6
Trumpour, A. W.	NW. 24-3-29-3	Trumpour Coulee	5
Trumpour, A. W.	NW. 24-3-29-3	Trumpour Coulee	13
Trumpour, A. W.	SW. 24-3-29-3	A Coulee	8

BATTLE CREEK AT RANGER STATION - STATION No. 11AB₈₁

Location: Lat. 49° 36', long. 109° 55', in SE. 1/4 sec. 31, tp. 7, rge. 29, W. 3rd Mer., Saskatchewan, about five miles downstream from Alberta-Saskatchewan Boundary. Drainage Area: 78 square miles. Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: Mainly March to October, 1951 to date. Extremes Recorded: Daily - Maximum, 18 April 1952, 1,070 cfs, Minimum, 7 September 1951, 0.8 cfs; Instantaneous Maximum - 2:30 a.m., 19 April 1952, 1,590 cfs. Remarks: Records excellent during open-water period and fair during ice period.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	9b	64	19.0	8.4	4.8	2.6	2.3	4.8	-	-
2.....	-	-	9	46	19.6	9.2	4.6	2.3	2.1	5.0	-	-
3.....	-	-	9	68	18.4	8.4	4.4	2.3	2.0	4.8	-	-
4.....	-	-	9	202	17.8	7.7	4.3	2.2	2.6	4.6	-	-
5.....	-	-	9	160	18.4	7.4	4.3	1.8	2.7	4.4	-	-
6.....	-	-	9	115	16.0	6.8	4.1	1.6	2.7	4.3	-	-
7.....	-	-	9	156	16.0	6.4	4.1	1.6	2.6	4.3	-	-
8.....	-	-	9	243	14.8	6.4	4.3	1.7	2.5	4.4	-	-
9.....	-	-	9	216	14.2	6.4	4.4	1.6	2.5	5.3	-	-
10.....	-	-	9	172	13.6	8.4	4.3	1.6	2.6	5.3	-	-
11.....	-	-	9	145	13.6	7.7	4.3	1.6	2.6	5.3	-	-
12.....	-	-	9	98	14.2	7.1	4.1	1.7	2.5	5.9	-	-
13.....	-	-	9	66	28.7	6.6	5.7	1.4	2.7	6.4	-	-
14.....	-	-	9	54b	22.6	6.6	10.7	1.6	4.3	5.9	-	-
15.....	-	-	9	47.6	17.8	9.7	11.2	1.4	8.0	5.7	-	-
16.....	-	-	8	41.3	16.0	10.2	7.7	1.7	6.6	5.7	-	-
17.....	-	-	8	36.4	14.8	9.2	6.4	1.3	5.3	5.5	-	-
18.....	-	-	8	32.2	13.0	7.7	5.7	1.1	4.3	5.5	-	-
19.....	-	-	8	28.0	12.4	9.2	5.3	1.3	4.1	5.5	-	-
20.....	-	-	8	25.6	11.8	8.0	4.8	1.3	5.0	7.7	-	-
21.....	-	-	8	25.6	10.7	7.4	4.4	1.5	5.0	6.8	-	-
22.....	-	-	8	23.2	10.2	6.8	3.9	1.5	4.3	6.4	-	-
23.....	-	-	8	21.4	9.7	7.1	3.8	1.3	4.8	6.2	-	-
24.....	-	-	9	19.6	9.2	6.4	4.1	1.4	5.9	6.2	-	-
25.....	-	-	9	19.6	8.8	5.7	3.6	1.1	5.9	5.9	-	-
26.....	-	-	9	19.0	8.4	5.3	3.5	1.1	5.9	5.7	-	-
27.....	-	-	9	18.4	7.7	5.0	3.2	1.2	5.0	5.9	-	-
28.....	-	-	9	17.2	7.4	4.8	3.1	1.7	5.0	6.2	-	-
29.....	-	-	14	17.8	7.1	4.6	3.1	3.0	5.5	6.2	-	-
30.....	-	-	21	17.8	6.6	4.8	3.2	3.2	5.0	5.9	-	-
31.....	-	-	58	-	6.6	-	3.0	3.1	-	5.9	-	-
Mean	-	-	10.9	73.9	13.7	7.18	4.79	1.74	4.08	5.60	-	-
Per sq. mi.	-	-	0.14	0.95	0.18	0.09	0.06	0.02	0.05	0.07	-	-
Acre-feet	-	-	668	4,390	843	427	294	107	242	344	-	-

The Period..... Discharge: Daily - Maximum 8 April, 243
 (245 days) - Minimum 18, 25 and 26 August, 1.1
 Instantaneous Maximum 3 a.m., 8 April, 344
 Mean 15.1; Per Square Mile 0.19
 Runoff: Acre-feet 7,320; Depth in inches on drainage area 1.76

b - Ice conditions 1 March to 14 April.

(International Gauging Station)

Location: Lat. 49° 26', long. 109° 41', in NE. 1/4 sec. 34, tp. 5, rge. 28, W. 3rd Mer., Saskatchewan, about three miles by stream above diversion weir and headgates of Cypress Lake West Inflow Canal and about fourteen miles north-east of Senate. Drainage Area: 240 square miles. Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: March to October, 1939 to date. Records for 1939 were obtained about one and one-half miles downstream. Extremes Recorded: Daily - Maximum, 14 April 1952, 2,790 cfs (estimated), Minimum, Nil at various times; Instantaneous Maximum - 14 April 1952, 3,020 cfs (by slope-area determination). Revisions: Data to 1950 inclusive were reviewed in co-operation with the United States Geological Survey and revised data are available upon application to the District Engineer at Calgary, for address see page 8. The March 1951 mean discharge was published in error in W.R.P. 109 and should be 1.52 cfs. Remarks: Records fair. This is one of a number of stations which are maintained jointly by Canada and the United States. Prior to 1947, records were collected by Canada only. Some overflow to the Middle Creek channel occurred above this station during the peak of the April 1952 flood. Discharge is affected by a few minor private irrigation diversions above this station.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	15b	341	32.3	8.9	17.2	2.5	0.9	6.5	-	-
2.....	-	-	15	362	33.6	8.9	19.4	2.2	0.7	7.1	-	-
3.....	-	-	15	266	34.2	8.1	20.4	1.5	0.7	5.7	-	-
4.....	-	-	15	282b	32.3	7.4	19.9	1.3	0.8	4.8	-	-
5.....	-	-	15	388	31.7	6.8	19.4	1.4	1.5	5.1	-	-
6.....	-	-	15	295	30.5	6.2	19.9	1.4	1.6	5.7	-	-
7.....	-	-	15	233	28.6	6.0	21.0	1.4	1.4	4.8	-	-
8.....	-	-	15	246	26.8	6.2	23.3	1.2	1.1	4.8	-	-
9.....	-	-	15	294	25.6	6.0	23.9	1.0	1.0	5.4	-	-
10.....	-	-	15	280	23.3	6.0	23.9	1.0	1.1	5.1	-	-
11.....	-	-	15	221	21.6	6.5	23.3	0.9	0.5	7.1	-	-
12.....	-	-	14	179	21.6	7.1	23.3	0.8	0.9	8.1	-	-
13.....	-	-	14	135	20.4	7.1	23.3	0.7	1.0	7.4	-	-
14.....	-	-	13	124	25.6	6.8	22.1	0.6	0.7	7.7	-	-
15.....	-	-	13	105	31.7	8.5	21.6	0.6	0.6	9.3	-	-
16.....	-	-	13	85	25.6	11.6	22.7	0.5	0.4	7.4	-	-
17.....	-	-	13	74	22.1	13.1	26.8	0.4	0.8	6.8	-	-
18.....	-	-	13	67	21.0	14.1	22.7	0.4	3.2	6.8	-	-
19.....	-	-	13	60	19.9	12.6	19.9	0.4	5.1	6.8	-	-
20.....	-	-	13	55	16.1	11.6	17.2	0.5	4.6	7.1	-	-
21.....	-	-	13	52	14.6	13.1	14.6	0.6	2.8	7.4	-	-
22.....	-	-	13	48.6	14.1	12.6	12.1	0.6	2.7	8.5	-	-
23.....	-	-	13	45.0	13.1	10.8	14.1	0.5	3.6	8.9	-	-
24.....	-	-	13	40.1	12.6	10.0	13.1	0.5	4.2	7.7	-	-
25.....	-	-	14	37.5	12.1	8.9	9.6	0.5	4.0	7.4	-	-
26.....	-	-	14	36.2	11.2	9.3	8.9	0.5	4.0	7.4	-	-
27.....	-	-	15	35.5	10.8	7.7	7.7	0.4	5.1	7.1	-	-
28.....	-	-	16	34.9	9.6	11.2	5.1	0.5	5.4	6.8	-	-
29.....	-	-	20	31.7	8.5	14.6	4.4	0.7	5.1	6.5	-	-
30.....	-	-	39	31.7	7.7	15.6	4.6	1.0	4.8	7.1	-	-
31.....	-	-	175	-	7.7	-	3.8	1.0	-	6.8	-	-
Mean	-	-	20.3	150	20.9	9.44	17.1	0.89	2.34	6.81	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	1,250	8,900	1,280	562	1,050	55	139	419	-	-

The Period..... Discharge: Daily - Maximum 5 April, 388
 (245 days) - Minimum at various times, 0.4
 Instantaneous Maximum 10 p.m., 1 April, 475
 Mean 28.1
 Runoff: Acre-feet 13,660

b - Ice conditions 1 March to 4 April.

(International Gauging Station)

Location: Lat. 49° 00' 10" long. 109° 25' 20", in SE. 1/4 sec. 4, tp. 1, rge. 26, W. 3rd Mer., Saskatchewan, about one-quarter mile above the International Boundary and twenty miles south of Consul. Drainage Area: 726 square miles. Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: Mainly March to October, 1917 to date. Extremes Recorded: Daily - Maximum, 15 April 1952, 5,590 cfs, Minimum, Nil at various times; Instantaneous Maximum - 7 a.m., 15 April 1952, 5,820 cfs. Revisions: Data to 1950 inclusive were reviewed in co-operation with the United States Geological Survey and revised data are available upon application to the District Engineer at Calgary, for address see page 8. Remarks: Records excellent during open-water period and fair during ice period. This is one of a number of stations which are maintained jointly by Canada and the United States. Some overflow to Middle Creek basin occurred above this station during the flood of April 1952. Discharge is affected by a number of irrigation schemes on this stream and its tributaries.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	6	370	26.2	18.6	10.0	8.0	0.5	Nil	7.4	-
2.....	-	-	4	715	34.4	15.4	14.0	8.0	0.3	"	8.0	-
3.....	-	-	6	945	40.8	14.0	19.5	10.6	0.2	"	8.0	-
4.....	-	-	8	670	36.6	21.3	24.2	7.4	0.2	"	8.6	-
5.....	-	-	7	405	35.5	25.2	23.2	6.8	0.2	"	8.6	-
6.....	-	-	6	220	35.5	28.3	19.5	5.2	0.1	"	9.3	-
7.....	-	-	6	170	32.3	28.3	13.4	8.6	0.0	Nil	-	-
8.....	-	-	5	150	29.3	22.2	10.0	9.3	0.0	0.0	-	-
9.....	-	-	5	105	27.3	22.2	13.4	6.2	0.0	0.4	-	-
10.....	-	-	5	80	24.2	21.3	14.6	4.2	0.0	0.8	-	-
11.....	-	-	5	70	22.2	18.6	13.4	3.6	0.0	1.0	-	-
12.....	-	-	5	60b	21.3	45.0	13.4	4.4	Nil	1.3	-	-
13.....	-	-	8	45.0	20.4	43.9	17.0	8.6	"	1.4	-	-
14.....	-	-	15	61	17.8	28.3	17.8	10.0	"	1.5	-	-
15.....	-	-	20	61	17.0	21.3	17.8	8.0	"	1.7	-	-
16.....	-	-	20	47.2	17.0	16.2	31.3	8.6	"	1.7	-	-
17.....	-	-	27	41.8	14.6	13.4	27.3	10.0	"	1.7	-	-
18.....	-	-	20	83	17.0	15.4	24.2	11.8	"	1.8	-	-
19.....	-	-	30	90	16.2	16.2	24.2	8.6	"	1.8	-	-
20.....	-	-	29	70	12.6	14.0	24.2	8.0	"	2.6	-	-
21.....	-	-	24	77	21.3	13.4	21.3	4.8	"	3.0	-	-
22.....	-	-	20	66	27.3	17.8	18.6	2.8	"	3.6	-	-
23.....	-	8b	17	54	22.2	19.5	18.6	2.0	"	3.8	-	-
24.....	-	8	21	97	17.0	17.0	21.3	1.7	"	4.1	-	-
25.....	-	8	59	91	20.4	17.0	17.0	1.5	"	4.1	-	-
26.....	-	8	120	77	20.4	17.8	16.2	1.1	"	4.8	-	-
27.....	-	8	165	70	20.4	19.5	23.2	1.0	"	5.2	-	-
28.....	-	8	405	63	22.2	15.4	19.5	0.9	"	5.7	-	-
29.....	-	-	740	41.8	21.3	9.3	11.2	0.9	"	6.2	-	-
30.....	-	-	575	29.3	19.5	7.4	8.6	0.8	"	6.2	-	-
31.....	-	-	540	-	19.5	-	9.3	0.7	-	6.8	-	-
Mean	-	-	94.3	171	23.5	20.1	18.0	5.62	0.05	2.30	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	5,800	10,170	1,450	1,200	1,110	346	3.0	141	-	-

The Period..... Discharge: Daily - Maximum 3 April, 945
 (245 days) - Minimum at various times, Nil
 Instantaneous Maximum 4 to 5 a.m., 3 April, 1,020
 Mean 41.6
 Runoff: Acre-feet 20,220

b - Ice conditions 23 February to 12 April.

(International Gauging Station)

Location: Lat. 48° 59' 00", long. 109° 31' 50", in NW. 1/4 sec. 8, tp. 37 N., rge. 17 E., Montana, about one mile south of the International Boundary and ten miles east of Willow Creek Customs Post. Drainage Area: 70 square miles. Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: Mainly March to October, 1927 to date. Records for 1927 obtained by manual gauge four miles downstream from present site. Extremes Recorded: Daily - Maximum, 30 March 1943, 2,000 cfs, Minimum, Nil at various times; Instantaneous Maximum - 30 March 1943, 3,090 cfs. Revisions: Data to 1950 inclusive were reviewed in co-operation with the United States Geological Survey and revised data are available upon application to the District Engineer at Calgary, for address see page 8. Remarks: Records excellent during open-water period and fair during ice period. This is one of a number of stations which are maintained jointly by the United States and Canada.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	Nil b	295b	0.0	0.0	Nil	Nil	Nil	Nil	-	-
2.....	-	-	"	106	0.0	0.0	"	"	"	"	-	-
3.....	-	-	"	34.1	0.0	0.0	"	"	"	"	-	-
4.....	-	-	"	20.7	0.0	0.0	"	"	"	"	-	-
5.....	-	-	"	14.0	0.0	0.0	"	"	"	"	-	-
6.....	-	-	"	9.2	0.0	0.0	"	"	"	"	-	-
7.....	-	-	"	6.9	0.0	0.0	"	"	"	"	-	-
8.....	-	-	"	4.6	0.0	0.0	"	"	"	"	-	-
9.....	-	-	"	3.0	0.0	0.0	"	"	"	"	-	-
10.....	-	-	"	3.9	0.0	0.0	"	"	"	"	-	-
11.....	-	-	"	2.7	0.0	0.0	"	"	"	"	-	-
12.....	-	-	"	1.2	0.0	0.0	"	"	"	"	-	-
13.....	-	-	"	0.6	0.0	0.0	"	"	"	"	-	-
14.....	-	-	"	0.3	0.0	0.0	"	"	"	"	-	-
15.....	-	-	"	0.2	0.0	0.0	"	"	"	"	-	-
16.....	-	-	"	0.1	0.0	0.0	"	"	"	"	-	-
17.....	-	-	"	0.1	0.0	0.0	"	"	"	"	-	-
18.....	-	-	"	0.1	0.0	0.0	"	"	"	"	-	-
19.....	-	-	"	0.1	0.0	0.0	"	"	"	"	-	-
20.....	-	-	"	0.0	0.0	0.0	"	"	"	"	-	-
21.....	-	-	"	0.0	0.0	0.0	"	"	"	"	-	-
22.....	-	-	"	0.0	0.0	0.0	"	"	"	"	-	-
23.....	-	-	"	0.0	0.0	0.0	"	"	"	"	-	-
24.....	-	-	"	0.0	0.0	0.0	"	"	"	"	-	-
25.....	-	-	"	0.0	0.0	0.0	"	"	"	"	-	-
26.....	-	-	2.4	0.0	0.0	0.0	"	"	"	"	-	-
27.....	-	-	32.7	0.0	0.0	0.0	"	"	"	"	-	-
28.....	-	-	145	0.0	0.0	0.0	"	"	"	"	-	-
29.....	-	-	245	0.0	0.0	0.0	"	"	"	"	-	-
30.....	-	-	270	0.0	0.0	0.0	"	"	"	"	-	-
31.....	-	-	390	-	0.0	-	"	"	-	"	-	-
Mean	-	-	35.0	16.8	0.00	0.00	Nil	Nil	Nil	Nil	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	2,150	997	0.0	0.0	Nil	Nil	Nil	Nil	-	-

The Period..... Discharge: Daily - Maximum 31 March, 390
 (245 days) - Minimum at various times, Nil
 Instantaneous Maximum 3 a.m., 31 March, 696
 Mean 6.48
 Runoff: Acre-feet 3,150

b - Ice conditions 1 March to 1 April.

(International Gauging Station)

Location: Lat. 48° 58', long. 109° 08', in NW. 1/4 sec. 17, tp. 37 N., rge. 20 E., Montana, about two miles south of International Boundary and twenty-seven miles southeast of Robsart, Saskatchewan. Drainage Area: 98 square miles. Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: Mainly March to October, 1927 to date. Records for 1927 were obtained by manual gauge near present site. Extremes Recorded: Daily - Maximum, 6 April 1952, 1,380 cfs, Minimum, Nil at various times; Instantaneous Maximum - 10:30 a.m., 12 July 1955, 2,300 cfs (by slope-area determination). Revisions: 1939, 1940, 1950, W.R.P. 117. Data to 1950 inclusive were reviewed in co-operation with the United States Geological Survey and revised data are available upon application to the District Engineer at Calgary, for address see page 8. Remarks: Records excellent. This is one of a number of stations which are maintained jointly by the United States and Canada.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	Nil	109	Nil	Nil	Nil	Nil	Nil	Nil	-	-
2.....	-	-	"	44.4	"	"	"	"	"	"	-	-
3.....	-	-	"	27.3	"	"	"	"	"	"	-	-
4.....	-	-	"	16.2	"	"	"	"	"	"	-	-
5.....	-	-	"	9.8	"	"	"	"	"	"	-	-
6.....	-	-	"	4.3	"	"	"	"	"	"	-	-
7.....	-	-	"	2.4	"	"	"	"	"	"	-	-
8.....	-	-	"	1.5	"	"	"	"	"	"	-	-
9.....	-	-	"	1.2	"	"	"	"	"	"	-	-
10.....	-	-	"	0.9	"	"	"	"	"	"	-	-
11.....	-	-	"	0.8	"	"	"	"	"	"	-	-
12.....	-	-	"	0.6	"	"	"	"	"	"	-	-
13.....	-	-	"	0.5	"	"	"	"	"	"	-	-
14.....	-	-	"	0.4	"	"	"	"	"	"	-	-
15.....	-	-	"	0.3	"	"	"	"	"	"	-	-
16.....	-	-	"	0.3	"	"	"	"	"	"	-	-
17.....	-	-	"	0.2	"	"	"	"	"	"	-	-
18.....	-	-	"	0.1	"	"	"	"	"	"	-	-
19.....	-	-	"	0.1	"	"	"	"	"	"	-	-
20.....	-	-	"	0.0	"	"	"	"	"	"	-	-
21.....	-	-	"	0.0	"	"	"	"	"	"	-	-
22.....	-	-	"	0.0	"	"	"	"	"	"	-	-
23.....	-	-	"	0.0	"	"	"	"	"	"	-	-
24.....	-	-	"	0.0	"	"	"	"	"	"	-	-
25.....	-	-	"	0.0	"	"	"	"	"	"	-	-
26.....	-	-	10e	0.0	"	"	"	"	"	"	-	-
27.....	-	-	50e	0.0	"	"	"	"	"	"	-	-
28.....	-	-	150e	0.0	"	"	"	"	"	"	-	-
29.....	-	-	193	0.0	"	"	"	"	"	"	-	-
30.....	-	-	248	Nil	"	"	"	"	"	"	-	-
31.....	-	-	374	-	"	-	"	"	-	"	-	-
Mean	-	-	33.1	7.34	Nil	Nil	Nil	Nil	Nil	Nil	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	2,030	437	Nil	Nil	Nil	Nil	Nil	Nil	-	-

The PeriodDischarge: Daily - Maximum 31 March, 374
 (245 days) - Minimum at various times, Nil
 Instantaneous Maximum 3:45 a.m., 31 March, 761
 Mean 5.08
 Runoff: Acre-feet 2,470

e - Estimated.

(International Gauging Station)

Location: Lat. 49° 00', long. 109° 14', in NW. 1/4 sec. 1, tp. 1, rge. 25, W. 3rd Mer., Saskatchewan, one-half mile north of International Boundary and eight miles south of Arena. Drainage Area: 47 square miles. Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: Periods of varying length, March 1927 to date. Prior to 1936, records were obtained at site about one mile downstream and south of the International Boundary. From 1936 to 1940, records were obtained about one mile upstream from present site. The recorder was established in August 1958. Average Discharge: (10 years) - 1.33 cfs. Extremes Recorded: Daily - Maximum, 7 April 1952, 796 cfs, Minimum, Nil at various times; Instantaneous Maximum - 6 July 1955, 1,220 cfs. Revisions: Data to 1950 inclusive were reviewed in co-operation with the United States Geological Survey and revised data are available upon application to the District Engineer at Calgary, for address see page 8. Remarks: Records good. This is one of a number of stations which are maintained jointly by Canada and the United States.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	Nil	105	Nil	Nil	Nil	Nil	Nil	Nil	-	-
2.....	-	-	"	40.6	"	"	"	"	"	"	-	-
3.....	-	-	"	17.4	" x	"	"	"	"	"	-	-
4.....	-	-	"	6.4	"	"	"	"	"	"	-	-
5.....	-	-	"	6.4	"	"	"	"	"	"	-	-
6.....	-	-	"	3.7	"	"	"	"	"	"	-	-
7.....	-	-	"	2.2	"	"	"	"	"	"	-	-
8.....	-	-	"	1.6	"	"	"	"	"	"	-	-
9.....	-	-	"	1.3	"	"	"	"	"	"	-	-
10.....	-	-	"	0.9	"	"	"	"	"	"	-	-
11.....	-	-	"	0.7	"	"	"	"	"	"	-	-
12.....	-	-	"	0.3	"	"	"	"	"	"	-	-
13.....	-	-	"	0.1	"	"	"	"	"	"	-	-
14.....	-	-	"	Nil	"	"	"	"	"	"	-	-
15.....	-	-	"	"	"	"	"	"	"	"	-	-
16.....	-	-	"	"	"	"	"	"	"	"	-	-
17.....	-	-	"	" e	"	"	"	"	"	"	-	-
18.....	-	-	"	94	"	"	"	"	"	"	-	-
19.....	-	-	"	48.0	"	"	"	"	"	"	-	-
20.....	-	-	"	20.7	"	"	"	"	"	"	-	-
21.....	-	-	"	13.0	"	"	"	"	"	"	-	-
22.....	-	-	"	4.1	"	"	"	"	"	"	-	-
23.....	-	-	"	2.0	"	"	"	"	"	"	-	-
24.....	-	-	"	1.4e	"	"	"	"	"	"	-	-
25.....	-	-	"	0.8	"	"	"	"	"	"	-	-
26.....	-	-	"	0.5	"	"	"	"	"	"	-	-
27.....	-	-	24.5x	0.4e	"	"	"	"	"	"	-	-
28.....	-	-	76	0.3	"	"	"	"	"	"	-	-
29.....	-	-	124	0.1	"	"	"	"	"	"	-	-
30.....	-	-	146	0.0e	"	"	"	"	"	"	-	-
31.....	-	-	193	-	"	-	"	"	-	"	-	-
Mean	-	-	18.2	12.4	Nil	Nil	Nil	Nil	Nil	Nil	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	1,120	738	Nil	Nil	Nil	Nil	Nil	Nil	-	-

The Period.....Discharge: Daily - Maximum 31 March, 193
(245 days) - Minimum at various times, Nil
Mean 3.82
Runoff: Acre-feet 1,860

x - Staff gauge readings 27 March to 3 May.

e - Estimated.

(International Gauging Station)

Source: Battle Creek. Location: Lat. 49° 28', long. 109° 37', in SE. 1/4 sec. 18, tp. 6, rge. 27, W. 3rd Mer., Saskatchewan, about two miles below diversion weir on Battle Creek, four miles above Cypress Lake West Dam and thirteen miles northwest of Consul. Gauge: Recording. Measurement of Discharge: From bridge or by wading. Period of Record: Irrigation seasons, 1939 to date. Prior to 1957, records were obtained about five hundred feet below diversion weir. Extremes Recorded: Daily - Maximum, 27 June 1942, 673 cfs; Instantaneous Maximum - 10:30 a.m., 27 June 1942, 764 cfs. Revisions: Data to 1950 inclusive were reviewed in co-operation with the United States Geological Survey and revised data are available upon application to the District Engineer at Calgary, for address see page 8. Remarks: Records good during open-water period and fair during ice period. This is one of a number of stations which are maintained jointly by Canada and the United States. Prior to 1947, records were collected by Canada only.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	Nil	276	2.1	0.2	Nil	0.1	Nil	Nil	-	-
2.....	-	-	"	384	1.6	0.2	"	0.0	"	"	-	-
3.....	-	-	"	422	1.2	0.1	"	0.0	"	"	-	-
4.....	-	-	"	375	1.0	0.1	"	0.0	"	"	-	-
5.....	-	-	"	362	0.9	0.1	"	0.0	"	"	-	-
6.....	-	-	"	340b	0.7	0.0	"	0.0	"	"	-	-
7.....	-	-	"	211	0.6	0.0	0.0	Nil	"	"	-	-
8.....	-	-	"	214	0.5	0.0	0.1	"	"	"	-	-
9.....	-	-	"	314	0.3	0.0	0.2	"	0.6	"	-	-
10.....	-	-	"	290	0.3	0.0	0.1	"	0.3	"	-	-
11.....	-	-	"	211	0.2	0.1	0.1	"	Nil	"	-	-
12.....	-	-	"	154	0.2	0.0	0.1	"	"	"	-	-
13.....	-	-	"	144	0.2	0.0	0.2	"	"	"	-	-
14.....	-	-	"	109	0.2	0.0	0.2	"	"	"	-	-
15.....	-	-	"	73	0.2	0.1	0.2	"	"	"	-	-
16.....	-	-	"	62	0.2	0.1	0.2	"	"	"	-	-
17.....	-	-	"	54	0.1	0.0	0.1	"	"	"	-	-
18.....	-	-	"	41.5	0.1	Nil	0.1	"	"	"	-	-
19.....	-	-	"	45.5	0.2	"	0.1	"	"	"	-	-
20.....	-	Nil b	"	46.5	0.2	0.0	0.2	"	"	"	-	-
21.....	-	"	"	47.5	0.1	0.0	0.6	"	"	"	-	-
22.....	-	"	"	50	0.1	Nil	0.5	"	"	"	-	-
23.....	-	"	"	48.5	0.1	0.0	1.2	"	"	"	-	-
24.....	-	"	"	48.0	0.1	0.0	0.4	"	"	"	-	-
25.....	-	"	"	48.5	0.1	Nil	0.2	"	"	"	-	-
26.....	-	"	"	45.5	0.1	"	0.1	"	"	"	-	-
27.....	-	"	"	42.5	0.1	"	0.2	"	"	"	-	-
28.....	-	"	0	38.6	0.1	"	0.1	"	"	"	-	-
29.....	-	-	2	19.3	0.1	"	0.1	"	"	"	-	-
30.....	-	-	19	2.5	0.0	"	0.2	"	"	"	-	-
31.....	-	-	119	-	0.0	-	0.1	"	-	"	-	-
Mean	-	-	4.52	151	0.38	0.03	0.18	0.00	0.03	Nil	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	278	8,960	24	2.0	11	0.2	1.8	Nil	-	-

The Period.....Discharge: Daily - Maximum 3 April, 422
(245 days) Runoff: Acre-feet 9,280

b - Ice conditions 20 February to 6 April.

CYPRSS LAKE WEST INFLOW CANAL DRAIN - STATION No. 11AB₈₅

Location: Lat. 49° 28', long. 109° 36', in NW. 1/4 sec. 17, tp. 6, rge. 27, W. 3rd Mer., Saskatchewan, immediately below drain gate on Cypress Lake West Inflow Canal, one-half mile above confluence with Battle Creek and four miles northwest of Oxarat P.O. Gauge: Recording. Measurement of Discharge: From footbridge or by wading. Period of Record: March to October, 1955 to date. Extremes Recorded: Daily - Maximum, 20 April 1955, 450 cfs, Minimum - Nil at various times; Instantaneous Maximum - 1 p.m., 19 April 1955, 474 cfs. Remarks: Records good during open-water period and fair during ice period. Canal used as emergency by-pass to return diverted water to Battle Creek. It may also be used to return stored water from Cypress Lake when Lake is at high stage.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	Nil	2	2.1	0.1	Nil	0.1	Nil	Nil	-	-
2.....	-	-	"	2	1.2	0.1	"	0.0	"	"	-	-
3.....	-	-	"	1	1.0	0.1	"	Nil	"	"	-	-
4.....	-	-	"	1	0.9	0.1	"	"	"	"	-	-
5.....	-	-	"	1	0.8	0.1	"	"	"	"	-	-
6.....	-	-	"	0.5	0.7	0.0	"	"	"	"	-	-
7.....	-	-	"	0.5	0.6	0.0	"	"	"	"	-	-
8.....	-	-	"	0.5	0.5	0.0	0.1	"	"	"	-	-
9.....	-	-	"	0.5	0.5	0.0	0.1	"	0.0	"	-	-
10.....	-	-	"	0.5	0.4	0.0	0.1	"	0.0	"	-	-
11.....	-	-	"	0.5	0.3	0.0	0.1	"	Nil	"	-	-
12.....	-	-	"	0.5	0.3	0.0	0.1	"	"	"	-	-
13.....	-	-	"	0.5	0.2	0.0	0.2	"	"	"	-	-
14.....	-	-	"	0.4	0.2	0.0	0.2	"	"	"	-	-
15.....	-	-	"	0.3	0.2	0.1	0.2	"	"	"	-	-
16.....	-	-	"	0.3	0.2	0.0	0.1	"	"	"	-	-
17.....	-	-	"	0.3	0.1	0.0	0.1	"	"	"	-	-
18.....	-	-	"	0.3	0.1	Nil	0.1	"	"	"	-	-
19.....	-	-	"	0.2	0.1	"	0.1	"	"	"	-	-
20.....	-	Nil b	"	0.2	0.1	"	0.1	"	"	"	-	-
21.....	-	"	"	0.2	0.1	"	0.2	"	"	"	-	-
22.....	-	"	"	0.2b	0.2	"	0.2	"	"	"	-	-
23.....	-	"	"	0.2	0.1	"	0.4	"	"	"	-	-
24.....	-	"	"	0.2	0.1	"	0.2	"	"	"	-	-
25.....	-	"	"	0.3	0.1	"	0.1	"	"	"	-	-
26.....	-	"	"	0.3	0.1	"	0.1	"	"	"	-	-
27.....	-	"	"	0.3	0.1	"	0.1	"	"	"	-	-
28.....	-	"	"	0.3	0.1	"	0.1	"	"	"	-	-
29.....	-	-	1	31.1	0.0	"	0.1	"	"	"	-	-
30.....	-	-	15	7.8	0.0	"	0.1	"	"	"	-	-
31.....	-	-	40	-	0.0	-	0.1	"	-	"	-	-
Mean	-	-	1.81	1.80	0.37	0.02	0.11	0.00	0.00	Nil	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	111	107	23	1.2	6.5	0.2	0.0	Nil	-	-

The Period.....Discharge: Daily - Maximum 29 April, 31.1
 (245 days) Instantaneous Maximum at noon, 29 April, 71
 Runoff: Acre-feet 249

b - Ice conditions 20 February to 22 April.

(International Gauging Station)

Source: Cypress Lake. Location: Lat. 49° 28', long. 109° 35', in SW. 1/4 sec. 16, tp. 6, rge. 27, W. 3rd Mer., Saskatchewan, about one mile below Cypress Lake West Dam and one-half mile above outlet into Battle Creek, three miles northwest of Oxarat P.O. and twelve miles north of Consul. Gauge: Recording. Measurement of Discharge: From bridge or by wading. Period of Record: Irrigation seasons, 1940 to date. The station was moved downstream from its former location nearer Cypress Lake West Dam in September 1952. Extremes Recorded: Daily - Maximum, 4 May 1951, 304 cfs; Instantaneous Maximum - 1 a.m., 4 May 1951, 461 cfs. Revisions: 1945, W.R.P. 121. Data to 1950 inclusive were reviewed in co-operation with the United States Geological Survey and no revisions were found necessary. Remarks: Records good during open-water period and fair during ice period. This is one of a number of stations which are maintained jointly by Canada and the United States. Prior to 1947, records were collected by Canada only. Extreme stage in 1951 caused by abnormal release of drainage from hay flat of water which had backed up behind snow banks in canal.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	Nil	1.0	5.8	72	22.5	52	0.6	0.2	-	-
2.....	-	-	"	1.0	5.3	65	22.5	52	0.6	0.1e	-	-
3.....	-	-	"	1.5	4.4	62	22.5	52	0.6	0.1	-	-
4.....	-	-	"	2.0	3.6	55	22.5	52	0.6	0.1	-	-
5.....	-	-	"	2.0	1.6	52	22.5	52	0.6	0.1	-	-
6.....	-	-	"	1.0	1.5	51	22.2	53	0.5	0.0	-	-
7.....	-	-	"	1.0	1.5	49.8	32.2	53	0.4	0.0	-	-
8.....	-	-	"	0.5b	1.5	53	48.5	54	0.4	0.0	-	-
9.....	-	-	"	0.5e	1.5	59	49.4	50	0.4	0.0	-	-
10.....	-	-	"	0.5	1.5	49.1	48.5	46.7	0.4	Nil	-	-
11.....	-	-	"	0.5	1.5	39.8	50	47.6	0.4	Nil	-	-
12.....	-	-	"	0.4	1.5	38.0	56	47.1	0.4	Nil	-	-
13.....	-	-	"	0.3	1.6	36.8	58	42.8	4.6	Nil	-	-
14.....	-	-	"	0.2	1.8	34.6	55	29.1	11.6	Nil e	-	-
15.....	-	-	"	0.2	1.6	34.2	47.6	16.7	11.4	0.2	-	-
16.....	-	-	"	0.2	1.6	32.5	45.8	10.8	11.2	0.1	-	-
17.....	-	-	"	0.2	14.7	31.6	45.4	0.8	11.2	0.0	-	-
18.....	-	-	"	0.1	28.3	30.8	44.1	0.3	10.5	0.0	-	-
19.....	-	-	"	0.1	27.9	27.6	43.6	0.3	13.4	0.0	-	-
20.....	-	Nil b	"	0.1e	36.3	20.4	42.8	0.3	22.7	0.0	-	-
21.....	-	"	"	58	71	20.7	42.4	0.4	30.4	0.0	-	-
22.....	-	"	"	90	74	20.7	47.4	0.4	29.6	0.0	-	-
23.....	-	"	"	86	73	21.1	54	0.4	28.7	0.0	-	-
24.....	-	"	"	80	72	22.2	53	0.3	28.7	0.0	-	-
25.....	-	"	"	72	72	22.5	55	0.4	27.9	0.0	-	-
26.....	-	"	"	35.4	72	22.2	59	0.4	27.5	0.0	-	-
27.....	-	"	"	13.1	72	22.5	58	0.5	27.9	0.0	-	-
28.....	-	"	0.5	6.2	71	22.2	58	0.6	27.5	0.0	-	-
29.....	-	-	0.5	4.0	71	22.5	58	0.7	27.5	Nil	-	-
30.....	-	-	1.0	6.6	71	21.8	52	0.7	18.9	Nil	-	-
31.....	-	-	1.0	-	72	-	52	0.7	-	Nil	-	-
Mean	-	-	0.10	15.5e	30.2	37.1	44.9	23.2	12.6	0.03e	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	6.0	922	1,860	2,210	2,760	1,420	748	1.8	-	-

The Period.....Discharge: Daily - Maximum 22 April, 90
 (245 days) Instantaneous Maximum 11 a.m., 21 May 58
 Runoff: Acre-feet 9,930

b - Ice conditions 20 February to 8 April.

e - Estimated 9 to 20 April and 2 to 14 October.

Source: Cypress Lake, via Cypress Lake West Outflow Canal. Location: Lat. 49° 27', long. 109° 35', in SW. 1/4 sec. 9, tp. 6, rge. 27, W. 3rd Mer., Saskatchewan, about one-half mile below two-way gate structure at lower end of Cypress Lake West Outflow Canal, and about thirteen miles northwest of Consul. Water may be delivered at two-way gate either to this canal or returned to Battle Creek from Cypress Lake. Gauge: Recording. Measurement of Discharge: From footbridge or by wading. Period of Record: Irrigation seasons 1952 to date. Extremes Recorded: Daily - Maximum, 19 July 1957, 37.5 cfs; Instantaneous Maximum - 11:30 p.m., 18 July 1957, 37.8 cfs. Remarks: Records good during open-water period and fair during ice period. The ditch was placed in operation in 1951 and some water was diverted during that season.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	Nil	1	0.4	10.5	3.7	12.4	0.7	0.1	-	-
2.....	-	-	"	0.1	0.4	8.9	9.1	12.4	0.6	0.0	-	-
3.....	-	-	"	0.0	0.4	7.1	17.8	12.2	0.6	0.0	-	-
4.....	-	-	"	0.0	0.4e	6.9	17.1	12.2	0.6	Nil	-	-
5.....	-	-	"	0.0	0.4	6.8	17.1	12.2	0.6	"	-	-
6.....	-	-	"	0.0b	0.4	8.7	17.3	12.2	0.5	"	-	-
7.....	-	-	"		0.4	13.0	17.8	12.2	0.4	"	-	-
8.....	-	-	"		0.4	13.2	20.7	12.2	0.4	"	-	-
9.....	-	-	"		0.4	14.7	20.7	12.0	0.3	"	-	-
10.....	-	-	"		0.4	12.6	18.5	11.4	0.3	"	-	-
11.....	-	-	"		0.4	10.9	18.5	11.4	0.3	"	-	-
12.....	-	-	"		0.4	10.1	15.7	12.2	0.3	"	-	-
13.....	-	-	"	Nil e	0.4	9.3	16.2	10.1	3.1	"	-	-
14.....	-	-	"		0.4	6.2	11.9	8.4	9.4	"	-	-
15.....	-	-	"		0.4	6.2	7.8	7.3	9.6	"	-	-
16.....	-	-	"		0.4	5.9	8.9	2.4	9.4	"	-	-
17.....	-	-	"		0.5	6.0	8.8		9.4	"	-	-
18.....	-	-	"		0.7	5.9	8.6		9.1	"	-	-
19.....	-	-	"		0.8	5.6	8.4		9.4	"	-	-
20.....	-	Nil b	"		3.9	4.8	8.2		14.7	"	-	-
21.....	-	"	"	5.1	14.1	4.6	8.2	0.5e	19.0	"	-	-
22.....	-	"	"	8.6	16.0	4.4	13.4		19.0	"	-	-
23.....	-	"	"	6.9	15.7	4.6	18.3		18.8	"	-	-
24.....	-	"	"	5.5	15.5	4.6	17.8		18.8	"	-	-
25.....	-	"	"	0.4e	15.3	4.5	18.8		18.5	"	-	-
26.....	-	"	"	0.4	12.7	4.2	21.2		18.5	"	-	-
27.....	-	"	"	0.4	10.0	4.1	21.2	0.5	18.5	"	-	-
28.....	-	"	1	0.4	9.8	3.9	20.7	0.6	18.5	"	-	-
29.....	-	-	1	0.4	9.8	4.0	19.5	0.6	18.8	"	-	-
30.....	-	-	2	0.4	10.1	3.9	12.2	0.5	13.0	"	-	-
31.....	-	-	3	-	10.3	-	12.2	0.6	-	"	-	-
Mean	-	-	0.23	0.99e	4.89	7.20	14.7	5.84	8.70	0.00	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	14	59	301	429	905	359	518	0.2	-	-

The Period.....Discharge: Daily - Maximum 26 and 27 July, 21.2
 (245 days) Instantaneous Maximum 2 a.m., 26 July, 21.4
 Runoff: Acre-feet 2,590

b - Ice conditions 20 February to 6 April.

e - Estimated 25 April to 4 May and as indicated.

Source: Battle Creek. Location: Lat. 49° 22', long. 109° 32', in SW. 1/4 sec. 11, tp. 5, rge. 27, W. 3rd Mer., Saskatchewan, immediately below headgate and about eight miles below Cypress Lake West Outflow Canal. Gauge: Recording. Measurement of Discharge: From footbridge or by wading. Period of Record: Irrigation seasons 1910 to 1933, 1935 and 1946 to date. Prior to 26 June 1949, records were obtained from staff gauge in sec. 10 or other locations in the vicinity. Some of the records prior to 1946 were published under the title "L. E. & S. J. Richardson Ditch near Consul". Extremes Recorded: Daily - Maximum, 2 June 1958, 39.3 cfs; Instantaneous Maximum - 4 p.m., 2 June 1958, 41.4 cfs. Remarks: Records fair. The ditch has been operated by P.F.R.A. since 1946 and records collected since that date are not comparable with records obtained from 1910 to 1935 on privately owned ditch.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	Nil	0.0	0.0	37.9	0.0e	20.0e	Nil	0.0x	-	-
2.....	-	-	"	0.0	0.0	39.3		20.3e	"	-	-	-
3.....	-	-	"	0.0	0.0	35.8		20.7e	"	-	-	-
4.....	-	-	"	0.0	0.0	29.5		21.0	"	-	-	-
5.....	-	-	"	0.0	0.0	25.8		20.6	"	-	-	-
6.....	-	-	"	0.0	0.0	15.6	0.0e	20.6	"	-	-	-
7.....	-	-	"	0.0	0.0	10.0		19.8	"	-	-	-
8.....	-	-	"	0.0b	0.0	8.6		19.8	"	0.0e	-	-
9.....	-	-	"		0.0	9.5		19.4	"	-	-	-
10.....	-	-	"		0.0	9.5		14.8	"	-	-	-
11.....	-	-	"		0.0	9.0	7.4	14.3	"	-	-	-
12.....	-	-	"		0.0	9.0	13.5	14.3	"	-	-	-
13.....	-	-	"		0.0	8.8	20.2e	11.4	"	-	-	-
14.....	-	-	"		0.0	8.6	19.8	8.8	"	-	-	-
15.....	-	-	"		0.0	8.2	19.0	3.1	"	0.0	-	-
16.....	-	-	"	0.0e	1.6	8.0	18.6	Nil e	"	0.0	-	-
17.....	-	-	"		8.8	7.6	18.2		"	0.0	-	-
18.....	-	-	"		8.6	7.2	17.4		e	0.0	-	-
19.....	-	-	"		14.8	6.6	17.1		"	0.0	-	-
20.....	-	-	"		12.9	7.0e	16.5		"	0.0	-	-
21.....	-	Nil b	"	0.0	15.6	7.5e	16.2	Nil	"	0.0	-	-
22.....	-	"	"		27.0	7.9e	15.6		"	0.0	-	-
23.....	-	"	"		33.7	8.4e	15.3		"	0.0	-	-
24.....	-	"	"		31.6	8.8e	15.0		0.0	0.0	-	-
25.....	-	"	"		30.2	9.3e	14.5		0.0	0.0	-	-
26.....	-	"	"	0.0	30.2	9.7	14.3	"	0.0	0.0	-	-
27.....	-	"	"	0.0	33.7	10.0	13.7e	"	0.0	0.0	-	-
28.....	-	"	"	0.0	35.1	8.8	18.6x	"	0.0	0.0	-	-
29.....	-	-	0.0	0.0	33.7	7.4	18.9e	"	0.0	0.0	-	-
30.....	-	-	0.0	0.0	34.4	0.0e	19.3e	"	0.0e	0.0	-	-
31.....	-	-	0.0	-	34.4	-	19.6e	"	-	0.0	-	-
Mean	-	-	0.00	0.00e	12.5	12.6	11.9e	8.03e	0.00e	0.00e	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	0.0	0.0	766	752	731	494	0.0	0.0	-	-

The Period.....Discharge: Daily - Maximum 2 June, 39.3
 (245 days) Instantaneous Maximum 4 p.m., 2 June, 41.4
 Runoff: Acre-feet 2,740

b - Ice conditions 21 February to 8 April.

e - Estimated 13 to 27 July, 18 to 30 September and as indicated.

x - Staff gauge readings.

Source: Battle Creek. Location: Lat. 49° 20', long. 109° 29', in NE. 1/4 sec. 30, tp. 4, rge. 26, W. 3rd Mer., Saskatchewan, about one mile below headgate and about three miles northeast of Consul. Gauge: Recording. Measurement of Discharge: From footbridge or by wading. Period of Record: Irrigation seasons 1911 to 1931 and 1938 to date. The recording gauge was installed in September 1949. Former records were obtained by staff gauges at various sites near the present location. Extremes Recorded: Daily - Maximum, 30 July 1952, 59 cfs; Instantaneous Maximum - 6 p.m., 29 July 1952, 70 cfs. Remarks: Records fair. The ditch has been operated by P.F.R.A. since 1946 and records since that date are not comparable with those obtained previously on privately owned ditch.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-		0.5	0.0	33.2	0.8	15.1	<u>Nil</u>	<u>0.5</u>	-	-
2.....	-	-		0.4	0.0	32.3	0.2	13.6	"	<u>Nil</u>	-	-
3.....	-	-		0.3	0.0	27.6	<u>Nil</u>	13.0	"	"	-	-
4.....	-	-		0.2	<u>Nil</u>	26.3	<u>Nil</u>	13.0	"	"	-	-
5.....	-	-		0.1	"	24.7	<u>Nil</u>	13.8	"	"	-	-
6.....	-	-	Nil e	0.0	"	26.3	<u>Nil</u>	16.0	"	"	-	-
7.....	-	-		<u>Nil</u>	"	27.1	<u>Nil</u>	17.0	"	"	-	-
8.....	-	-		"	"	26.8	6.9	15.4	"	"	-	-
9.....	-	-		"	"	27.1	11.4	11.4	"	"	-	-
10.....	-	-		5.6e	"	27.4	11.6	10.1	"	"	-	-
11.....	-	-		8.3	"	27.1	13.4	9.9	"	"	-	-
12.....	-	-		8.3	"	26.3	14.3	10.1	"	"	-	-
13.....	-	-		7.9	"	25.8	12.5	10.3	"	"	-	-
14.....	-	-		5.1	"	20.7	12.5	9.5	"	"	-	-
15.....	-	-		0.3	"	20.2	11.9	8.1	"	"	-	-
16.....	-	-		0.1	"	19.2	8.7	7.0	"	"	-	-
17.....	-	-		0.1	0.0	18.7	5.4	6.8	"	"	-	-
18.....	-	-		0.0	0.8	19.5	8.4	4.7	"	"	-	-
19.....	-	-		<u>Nil</u>	0.9	14.6	11.0	0.0	"	"	-	-
20.....	-	-		"	6.4	9.9	11.0	<u>Nil</u>	"	"	-	-
21.....	-	<u>Nil</u>		"	10.1	5.6	11.2	"	"	"	-	-
22.....	-	"		"	19.1	4.3	13.2	"	"	"	-	-
23.....	-	"		"	26.3	2.2	13.0	"	"	"	-	-
24.....	-	"		"	26.6	1.3	10.1	"	"	"	-	-
25.....	-	"		"	27.1	<u>2.5</u>	10.1	"	"	"	-	-
26.....	-	"	0.1e	"	27.4	2.6	10.3	"	"	"	-	-
27.....	-	"		"	27.4	2.0	10.3	"	"	"	-	-
28.....	-	"		"	27.4	1.6	11.9	"	"	"	-	-
29.....	-	-		0.2	"	30.9	1.5	14.5	"	0.2	-	-
30.....	-	-		0.3	"	32.6	1.7	14.7	"	<u>1.5</u>	-	-
31.....	-	-		<u>0.4</u>	-	31.8	-	<u>14.9</u>	"	-	-	-
Mean	-	-	0.03e	1.24	9.51	16.9	8.85	6.61	0.06	0.02	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	2.0	74	585	1,000	544	406	3.4	1.0	-	-

The Period.....Discharge: Daily - Maximum 1 June, 33.2
 (245 days) Instantaneous Maximum 9 p.m., 1 June, 33.7
 Runoff: Acre-feet 2,620

e - Estimated 28 March to 10 April and as indicated.

Source: Battle Creek. Location: Lat. 49° 14', long. 109° 33', in NE. 1/4 sec. 22, tp. 3, rge. 27, W. 3rd Mer., Saskatchewan, about four miles below confluence of Battle Creek and Bushy Coulee and five miles south of Consul. Gauge: Recording. Measurement of Discharge: From footbridge or by wading. Period of Record: Irrigation seasons 1912, 1914 to 1935 and 1938 to date (estimates of total diversion only in some years), miscellaneous measurements in 1911 and 1913; recording gauge was re-established at present location on 21 September 1949. Records during 1922 to 1924 and 1927 to 1929 were collected by recorder at present site; other records were obtained by manual gauge in SE. 1/4 sec. 22. Extremes Recorded: Daily - Maximum, 14 April 1952, 85 cfs; Instantaneous Maximum - 14 April 1952, 90 cfs. Remarks: Records fair. This is the last significant diversion from Battle Creek above the International Boundary. The ditch has been operated by P.F.R.A. since 1949.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	Nil	15.8	12.2	6.3	0.1	5.9	Nil	0.1	-	-
2.....	-	-	"	31.6	13.6	7.1	0.0	5.7	"	0.1	-	-
3.....	-	-	"	27.1	11.9	7.8	0.0	5.5	"	0.0	-	-
4.....	-	-	"	24.6	11.3	7.7	Nil	5.6	"	Nil	-	-
5.....	-	-	"	19.2	11.0	7.7	"	5.7	"	"	-	-
6.....	-	-	"	17.2	10.3	6.9	"	5.5	"	"	-	-
7.....	-	-	"	15.8	9.8	6.1	"	4.8	"	"	-	-
8.....	-	-	"	12.2	9.5	5.9	"	4.3	"	"	-	-
9.....	-	-	"	10.3	9.2	5.3	"	4.4	"	"	-	-
10.....	-	-	"	8.8	8.8	6.2	"	4.7	"	"	-	-
11.....	-	-	"	8.0	8.6	8.2	"	4.7	"	"	-	-
12.....	-	-	"	6.9	8.3	7.4	"	4.7	"	"	-	-
13.....	-	-	"	9.9	8.0	5.9	"	4.3	"	"	-	-
14.....	-	-	"	10.2	7.7	4.8	"	3.3	"	"	-	-
15.....	-	-	"	7.6	7.6	4.3	"	1.0	"	"	-	-
16.....	-	-	"	6.4	7.7	4.4	"	0.6	"	"	-	-
17.....	-	-	"	12.8	7.4	4.2	"	0.5	"	0.3	-	-
18.....	-	-	"	16.2	6.3	3.9	"	0.4	"	1.2	-	-
19.....	-	-	"	15.1	7.0	3.8	"	0.4	"	1.1	-	-
20.....	-	-	"	16.0	8.6	4.0	"	0.3	"	1.3	-	-
21.....	-	-	"	15.3	8.6	4.3	"	0.1	"	1.2	-	-
22.....	-	Nil	"	13.9	7.4	4.2	"	Nil	"	1.2	-	-
23.....	-	"	"	17.1	8.2	4.3	"	"	"	1.0	-	-
24.....	-	"	"	17.6	7.8	4.4	"	"	"	0.9	-	-
25.....	-	"	"	16.9	7.8	4.8	"	"	"	0.8	-	-
26.....	-	"	"	16.0	7.8	4.4	"	"	1.0	0.8	-	-
27.....	-	"	0.0	15.0	7.7	3.3	3.6	"	1.3	0.6	-	-
28.....	-	"	0.1	11.4	7.7	0.7	4.7	"	0.5	0.2	-	-
29.....	-	-	0.6	8.4	7.7	0.1	5.1	"	0.3	0.1	-	-
30.....	-	-	2.6	7.3	7.4	0.1	5.5	"	0.2	0.0	-	-
31.....	-	-	7.3	-	6.4	-	6.2	"	-	0.0	-	-
Mean	-	-	0.34	14.4	8.69	4.95	0.81	2.34	0.11	0.35	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	21	854	534	295	50	144	6.5	22	-	-

The Period.....Discharge: Daily - Maximum 2 April, 31.6
 (245 days) Instantaneous Maximum 4 p.m., 2 April, 32.6
 Runoff: Acre-feet 1,930

MISCELLANEOUS DIVERSIONS MADE IN BATTLE CREEK TRIBUTARY BASIN
FOR THE YEAR 1958

Ditch Owner	Location	Diverting From	Approx. Acre- feet Diverted
Assels, V. C.	NE. 4-5-26-3	A Coulee	6
Backman, L. C.	SE. 16-5-26-3	A Coulee	5
Backman, L. C.	SE. 15-5-26-3	A Coulee	13
Backman, L. C.	SW. 15-5-26-3	A Coulee	40
Behrman, H. D.	NW. 23-4-26-3	Bushy Coulee	12
Behrman, H. D.	SE. 22-4-26-3	Bushy Coulee	35
Behrman, H. D. & W.	SW. 23-4-26-3	A Coulee	35
Berg, G.	NW. 18-4-25-3	A Coulee	18
Besteland, E.	NE. 5-5-26-3	Swan Coulee	2
Brekhus, S. E. & E.	NW. 8-6-25-3	A Coulee	8
Dahl, A. I.	SW. 27-5-25-3	A Coulee	4
French, P. A.	SW. 33-3-27-3	A Coulee	5
Froholtm, C.	NW. 25-5-26-3	A Coulee	7
Glagau, O. M.	NE. 1-5-27-3	A Coulee	4
Godich, J. Sr.	SE. 27-3-27-3	A Coulee	5
Gold, R. G.	NW. 24-3-27-3	A Coulee	10
Heglund, L. W.	NW. 19-4-26-3	A Coulee	3
Howell, W.	NW. 36-5-26-3	A Coulee	13
Johnson, E.	NE. 8-6-27-3	Battle Creek	23
Knolly's Grazing Co-op. Assoc.	NW. 31-5-22-3	A Coulee	5
Leslie, J.	11/12-8-20-3	Six Mile Coulee	45
Madson, M. & A. Elder	NE. 29-3-25-3	Grassy Coulee	47
McConwell, J.	NE. 23-3-27-3	A Coulee	10
McCuaig, D. J.	E. 1/2 3-4-27-3	A Coulee	5
McCuaig, D. J.	SW. 2-4-27-3	A Coulee	6
McCuaig, D. J.	NE. 1-4-27-3	A Coulee	8
Mitchell Ranching Co. Ltd.	NE. 9-6-29-3	Battle Creek	50
Palmer, J.	NE. 26-4-26-3	A Coulee	10
Parsonage, G. C.	SE. 14-7-29-3	Mull Creek	35
Parsonage, J.	NE. 36-2-28-3	A Coulee	8
Pedersen, W.	SW. 24-5-26-3	A Coulee	8
Pedersen, W.	NW. 13-5-26-3	A Coulee	4
Pettyjohn, W. E.	NE. 34-5-26-3	A Coulee	4
Pierce, J. D.	NE. 3-5-28-3	A Coulee	3
Pridmore, J. E.	NE. 29-5-27-3	A Coulee	10
Rabe, R.	NE. & SW. 36-4-26-3	A Coulee	18
Reamer, R.	NE. 21-3-26-3	A Coulee	11
Reamer, R.	NE. 16-3-26-3	A Coulee	7
Reesor, D. H. P.	SE. 36-4-27-3		
	SW. 31-4-26-3	Battle Creek	18
Reesor, J. H.	SE. 36-4-27-3		
	SW. 31-4-26-3	Battle Creek	50
Reesor, J. H.	SE. 36-4-27-3		
	SW. 31-4-26-3	Battle Creek	23
Retterath, P.	6/7-3-26-3	Stenhouse Coulee	57
Retterath, P. T.	NE. 20-3-26-3	A Coulee	34
Retterath, P. T.	NE. 4-3-26-3	A Coulee	11
Retterath, P. T.	SE. 4-3-26-3	A Coulee	18
Reynolds, F. C.	NE. 36-3-28-3	A Coulee	4
Reynolds, F. C.	SE. 35-3-28-3	A Coulee	3
Sawden, E.	SE. 34-2-27-3	A Coulee	45
Sawden, E.	NW. 34-2-27-3	A Coulee	85
Sawden, E. & A. Rotnem	NW. 3-3-27-3	Swede Coulee	65
Schaffer, S. & E. M. Gaff	Road allowance west of NW. 34-5-29-3	Battle Creek	75
Schaffer, S. & E. Gaff	NW. 25-5-29-3	A Coulee	16
Schaffer, S. & E. Gaff	NE. 26-5-29-3	A Coulee	16
Schmidt, S. F.	SE. 5-3-26-3		
	NW. 32-2-26-3	A Coulee	11
Shepherd, J.	NW. 34-5-28-3	Halfway Coulee	30
Spangler, C. B. & M.	NE. 6-7-28-3	Six Mile Coulee	68
Spangler, C. B. & M.	10/11-7-28-3	Dorval Coulee	25
Spangler, C. B. & M.	NE. 3-7-28-3	Menin Coulee	45
Spangler, C. B. & M.	SW. 12-7-28-3	Spangler Coulee	15
Spangler, C. B. & M.	NW. 3-7-28-3	Halfway Coulee	45

MISCELLANEOUS DIVERSIONS MADE IN BATTLE CREEK TRIBUTARY BASIN
FOR THE YEAR 1958 (Continued)

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Ditch Owner	Location	Diverting From	Approx. Acre- feet Diverted
Spangler, C. B. & M.	NW. 1-7-29-3	A Coulee	40
Stetar, T.	NE. 16-3-27-3	A Coulee	6
Stetar, T.	NE. 16-3-27-3	Kompan Coulee	4
Stirling, R.	SW. 20-3-27-3	A Coulee	8
Stirling, R.	SW. 23-3-27-3	A Coulee	5
Stirling, R.	NW. 15-3-27-3	Battle Creek	33
Teigen, G.	NW. 17-5-25-3	A Coulee	19
Tenborg, N. H. & L. D.	NE. 28-3-27-3	A Coulee	7
Turner, A. A.	NW. 32-4-28-3	A Coulee	9
Warberg, A.	SW. 25-5-25-3	A Coulee	8
Warberg, A.	SE. 25-5-25-3	A Coulee	4
Weisgerber, F.	NE. 33-3-28-3	A Coulee	4
Wilson, L. W.	NW. 1-6-28-3	A Coulee	25
Ziegler, H. M.	NW. 34-5-27-3	A Coulee	6

FRENCHMAN RIVER ABOVE EASTEND RESERVOIR - STATION No. 11AC₁₈

(International Gauging Station)

Location: Lat. 49° 29', long. 109° 00', in NW. 1/4 sec. 23, tp. 6, rge. 23, W. 3rd Mer., Saskatchewan, at Phillips' Ranch about ten miles west of Eastend and about three miles below confluence with North Branch of Frenchman River. Drainage Area: 598 square miles. Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: Mainly March to October, 1912 to 1917 and 1937 to date. Records collected by manual gauges near present site to 1917 and from 30 April to 12 August 1938, and in NW. 1/4 sec. 21, tp. 6, rge. 22 in 1937 and the spring of 1938. Extremes Recorded: Daily - Maximum, 15 April 1952, 9,510 cfs, Minimum, 27 August 1937, 0.4 cfs; Instantaneous Maximum - 5 a.m., 16 April 1952, 12,100 cfs (computed by Hydrology Division, P.F.R.A.) or 13,000 cfs (computed by U.S.G.S.). Revisions: Data to 1950 inclusive were reviewed in co-operation with the United States Geological Survey and revised data are available upon application to the District Engineer at Calgary, for address see page 8. Remarks: Records excellent during open-water period and fair during ice period. This is one of a number of stations which are maintained jointly by Canada and the United States. Prior to 1947, records were collected by Canada only. The stream is affected by regulation for irrigation purposes above this station.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	18b	497	38.4	22.6	11.0	83	6.5	9.3	-	-
2.....	-	-	18x	766	52	27.4	14.3	82	5.0	9.3	-	-
3.....	-	-	19x	1,220	61	26.6	14.3	80	4.6	8.9	-	-
4.....	-	-	18	2,400b	56	25.0	12.0	78	4.8	9.7	-	-
5.....	-	-	17x	2,260	53	25.0	10.5	78	4.8	9.3	-	-
6.....	-	-	18	1,060	45.7	31.1	10.5	78	4.6	8.5	-	-
7.....	-	-	18	880	45.7	30.1	10.5	76	4.2	8.1	-	-
8.....	-	-	18	749	45.7	25.0	10.5	34.0	3.7	8.5	-	-
9.....	-	-	22	506	41.2	23.4	9.7	11.3	3.4	9.7	-	-
10.....	-	-	19	311	38.4	56	9.7	5.9	3.4	10.1	-	-
11.....	-	-	18	212	38.4	130	13.1	4.4	3.2	11.5	-	-
12.....	-	-	18	198	37.1	110	16.7	3.5	3.0	13.1	-	-
13.....	-	-	16	264	35.1	68	38.4	2.9	3.0	13.7	-	-
14.....	-	-	17	239	33.1	36.9	52	2.7	2.9	14.3	-	-
15.....	-	-	17	198	31.1	23.4	52	2.4	3.7	12.5	-	-
16.....	-	-	19	157	29.2	18.5	52	2.2	5.6	12.0	-	-
17.....	-	-	17	132	29.2	17.9	48.7	1.9	5.9	11.5	-	-
18.....	-	-	17	118	26.6	16.1	44.2	12.8	5.0	11.0	-	-
19.....	-	-	17	87	25.8	14.9	42.7	44.2	4.6	10.5	-	-
20.....	-	-	18	75	23.4	15.5	41.2	45.7	4.0	11.5	-	-
21.....	-	-	20x	63	21.9	13.1	41.2	44.2	4.0	12.0	-	-
22.....	-	-	19	53	21.9	13.1	39.8	44.2	4.2	11.5	-	-
23.....	-	-	18x	50	20.5	14.3	63	39.8	4.8	12.0	-	-
24.....	-	-	19x	45.7	18.5	13.1	71	17.2	5.0	11.0	-	-
25.....	-	-	23x	42.7	18.5	11.5	70	7.1	5.9	11.5	-	-
26.....	-	-	27x	38.4	17.9	11.5	70	5.0	5.9	11.5	-	-
27.....	-	-	28	37.1	16.7	10.5	70	3.9	6.5	11.0	-	-
28.....	-	-	31	35.1	15.5	9.3	70	3.9	7.4	11.0	-	-
29.....	-	-	36	35.1	14.9	8.5	68	5.0	10.1	11.5	-	-
30.....	-	-	43	35.1	13.7	9.7	78	8.9	8.9	11.5	-	-
31.....	-	-	256	-	13.7	-	83	8.1	-	11.5	-	-
Mean	-	-	28.4	425	31.6	28.6	39.9	29.6	4.95	10.9	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	1,740	25,320	1,940	1,700	2,460	1,820	295	672	-	-

The Period.....Discharge: Daily - Maximum 4 April, 2,400
 (245 days) - Minimum 17 August, 1.9
 Instantaneous Maximum 11 p.m., 4 April, 2,810
 Mean 74.0
 Runoff: Acre-feet 35,950

b - Ice conditions 1 March to 4 April.

x - Staff gauge readings 5 to 21 March and as indicated.

(International Gauging Station)

Location: Lat. 49° 30' 55", long. 108° 50' 10", in SE. 1/4 sec. 36, tp. 6, rge. 22, W. 3rd Mer., Saskatchewan, near Eastend and about one mile below Eastend Reservoir. Drainage Area: 648 square miles. Gauge: Recording. Measurement of Discharge: From bridge or by wading. Period of Record: Mainly March to October, 1909 to 1916, 1918 to 1931, 1935 to 1936 and 1939 to date. Recorder established 31 July 1941. Records prior to that date obtained by manual gauges at present site after 11 April 1939 and at various sites in sections 31 and 32, tp. 6, rge. 21 before that date. Records were published under titles "near East End" in 1909 and 1910, "at Enright and Strong's Ranche" in 1911 to 1913 and "at East End" from 1914 to 1936. Extremes Recorded: Daily - Maximum, 16 April 1952, 9,610 cfs, Minimum, (Regulated) on 14 August 1943 and 31 July 1945, 0.0 cfs; Instantaneous Maximum - about 7 a.m., 16 April 1952, 11,500 cfs. Revisions: Data to 1950 inclusive were reviewed in co-operation with the United States Geological Survey and revised data are available upon application to the District Engineer at Calgary, for address see page 8. Remarks: Records excellent during open-water period and fair during ice period. This is one of a number of stations which are maintained jointly by Canada and the United States. Prior to 1947, records were collected by Canada only. The stream is affected by regulation for irrigation purposes above this station.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	18b	439	28.8	6.7	5.0	49.9	4.7	4.7	-	-
2.....	-	-	18	680	28.8	6.2	4.7	49.9	4.7	5.4	-	-
3.....	-	-	18	1,170b	31.6	6.2	4.7	49.9	4.3	7.6	-	-
4.....	-	-	18	2,240	41.7	6.2	4.7	49.9	4.7	8.6	-	-
5.....	-	-	18	2,640	43.3	5.8	5.0	48.2	4.7	8.6	-	-
6.....	-	-	18	1,450	43.3	5.4	5.0	48.2	4.7	8.6	-	-
7.....	-	-	18	858	44.9	5.4	5.0	48.2	4.3	9.1	-	-
8.....	-	-	18	791	44.9	5.4	5.4	48.2	2.8	9.1	-	-
9.....	-	-	19	558	44.9	6.2	5.4	29.8	3.1	9.1	-	-
10.....	-	-	19	223	44.9	6.7	5.0	8.6	4.7	9.1	-	-
11.....	-	-	19	117	37.2	6.7	5.0	5.0	5.0	9.1	-	-
12.....	-	-	19	117	37.2	6.7	4.7	5.0	5.4	9.1	-	-
13.....	-	-	18	119	35.8	7.1	4.7	5.0	5.0	9.1	-	-
14.....	-	-	18	97	30.2	7.6	4.7	4.7	5.0	9.1	-	-
15.....	-	-	18	74	28.8	6.7	4.7	2.6	4.7	9.1	-	-
16.....	-	-	18	72	25.0	6.2	4.7	2.3	4.7	9.7	-	-
17.....	-	-	18	76	17.3	5.8	4.7	1.9	4.7	9.1	-	-
18.....	-	-	18	91	10.9	5.8	5.0	1.7	4.7	9.7	-	-
19.....	-	-	18	87	12.3	6.2	5.0	3.7	4.7	9.1	-	-
20.....	-	-	18	72	12.3	5.8	5.0	4.3	4.3	9.7	-	-
21.....	-	-	18	49.9	10.9	5.8	19.5	4.3	4.3	9.1	-	-
22.....	-	-	18	43.3	9.7	5.4	22.7	4.7	4.7	9.1	-	-
23.....	-	-	18	43.3	8.6	5.4	49.9	7.1	4.7	9.1	-	-
24.....	-	-	18	41.7	7.1	5.4	52	9.1	4.7	10.3	-	-
25.....	-	-	20	43.3	7.1	5.4	52	7.6	4.3	13.0	-	-
26.....	-	-	25	41.7	6.7	5.4	52	7.1	4.3	13.0	-	-
27.....	-	-	30	38.7	6.7	5.4	52	6.2	4.3	13.0	-	-
28.....	-	-	40	35.8	6.7	5.0	49.9	6.7	4.3	13.8	-	-
29.....	-	-	50	33.0	6.7	4.7	49.9	5.8	4.3	13.8	-	-
30.....	-	-	81	27.5	6.7	5.0	49.9	5.4	4.3	13.8	-	-
31.....	-	-	259	-	6.7	-	49.9	5.0	-	13.0	-	-
Mean	-	-	30.4	412	23.5	5.92	19.3	17.3	4.50	9.80	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	1,870	24,530	1,440	352	1,190	1,060	268	602	-	-

The Period.....Discharge: Daily - Maximum 5 April, 2,640
 (245 days) - Minimum 18 August, 1.7
 Instantaneous Maximum 9 a.m., 5 April, 2,810
 Mean 64.4
 Runoff: Acre-feet 31,310

b - Ice conditions 1 March to 3 April.

Location: Lat. 49° 12', long. 107° 41', in NE. 1/4 sec. 9, tp. 3, rge. 13, W. 3rd Mer., Saskatchewan, about two miles east and three miles south of Val Marie and near south or lower end of Val Marie Irrigation District. Drainage Area: 1,620 square miles. Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: March to October, 1937 to 1951 and May to October, 1952 to date. The recording gauge was established on 18 August 1938. It was removed after the 1951 season and replaced again in May 1953. Other records were obtained by manual gauges near the present site. Extremes Recorded: Daily - Maximum, 31 March 1943, 3,460 cfs, Minimum, Nil at various times; Instantaneous Maximum - 14 April 1952, 17,000 cfs (from slope-area determination by Hydrology Division, P.F.R.A.). Revisions: Data to 1950 inclusive were reviewed in co-operation with the United States Geological Survey and revised data are available upon application to the District Engineer at Calgary, for address see page 8. Remarks: Records good. This station was maintained jointly by Canada and the United States from 1947 to 1952. Discharge is affected by regulation for irrigation purposes above this station.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	-	30.0e	60	9.0e	10.6	1.0	0.3	-	-
2.....	-	-	-	-	27.5	47.6	10.2	10.6	0.9	0.3	-	-
3.....	-	-	-	-	23.1	17.5	10.2	11.8	1.2	0.3	-	-
4.....	-	-	-	-	21.5	16.9	12.2	9.2	0.7	0.3	-	-
5.....	-	-	-	-	20.0	22.3	16.3	9.9	0.5	0.4	-	-
6.....	-	-	-	-	19.3	16.3	16.3	9.5	1.5	0.3	-	-
7.....	-	-	-	-	18.7	15.1	14.6	7.9	20.7	0.3	-	-
8.....	-	-	-	-	17.5	12.6	15.1	9.2	15.7	0.4	-	-
9.....	-	-	-	-	17.5	13.1	12.6	9.5	13.1	0.3	-	-
10.....	-	-	-	-	34.5	12.2	9.2	9.5	10.2	0.7	-	-
11.....	-	-	-	-	33.2	12.6	6.0e	7.6	8.8	0.6	-	-
12.....	-	-	-	-	35.8	12.2	7.1	8.8	8.8	0.6	-	-
13.....	-	-	-	-	30.8	13.6	7.3	6.8	10.2	0.6	-	-
14.....	-	-	-	-	19.3	20.7	7.6	4.0	11.4	0.6	-	-
15.....	-	-	-	-	22.3	29.6	9.2	4.2	13.1	0.8	-	-
16.....	-	-	-	-	23.1	33.2	9.5	3.8	8.8	0.9	-	-
17.....	-	-	-	-	18.7	23.9	7.1	3.3	7.1	0.8	-	-
18.....	-	-	-	-	18.1	25.7	5.0e	4.2	4.9	0.5	-	-
19.....	-	-	-	-	17.5	23.9	5.0e	4.9	2.8	0.7	-	-
20.....	-	-	-	-	24.8	25.7	5.0e	4.5	3.0	1.2	-	-
21.....	-	-	-	-	33.2	19.3	7.1	4.5	4.5	2.5	-	-
22.....	-	-	-	-	24.8	14.1	5.6	4.0	7.3	2.8	-	-
23.....	-	-	-	-	21.5	15.1	7.1	4.5	4.7	3.2	-	-
24.....	-	-	-	-	20.0	12.2	7.3	4.9	3.0	3.5	-	-
25.....	-	-	-	-	35.8	10.6	10.6	6.8	1.8	2.5	-	-
26.....	-	-	-	-	47.6	11.4	13.1	6.0	1.3	4.9	-	-
27.....	-	-	-	-	41.0	11.4	13.6	4.0	0.9	6.0	-	-
28.....	-	-	-	-	38.4	9.0e	13.1	2.8	0.7	5.6	-	-
29.....	-	-	-	-	41.0	9.0e	13.6	2.3	1.0	5.3	-	-
30.....	-	-	-	-	55	9.0e	14.6	2.2	0.5	5.1	-	-
31.....	-	-	-	-	44.9	-	15.1	1.5	-	4.7	-	-
Mean	-	-	-	-	28.3	19.2	10.2	6.24	5.67	1.84	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	-	-	1,740	1,140	625	383	337	113	-	-

The Period.....Discharge: Daily - Maximum 1 June, 60
(245 days) - Minimum at various times in October, 0.3

Instantaneous Maximum 6 p.m., 1 June, 72

Mean 11.9

Runoff: Acre-feet 4,340

e - Estimated.

(International Gauging Station)

Location: Lat. 49° 00', long. 107° 18', in lot 3, sec. 6, tp. 37 N., rge. 34 E., Montana, at International Boundary and about twenty-seven miles southeast of Val Marie, Saskatchewan. Drainage Area: 2,020 square miles. Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: Mainly March to October, 1917 to date. Prior to 23 June 1937, records were obtained about one-half mile upstream and from June 1937 to October 1952 about one hundred feet upstream from present site. Extremes Recorded: Daily - Maximum, 15 April 1952, 19,200 cfs, Minimum, Nil at various times; Instantaneous Maximum - 3 p.m., 15 April 1952, 22,700 cfs (by slope-area determination). Revisions: The August 1953 mean discharge has been corrected to 11.2 cfs. Data to 1950 inclusive were reviewed in co-operation with the United States Geological Survey and revised data are available upon application to the District Engineer at Calgary, for address see page 8. Remarks: Records excellent during open-water periods and fair during ice period. This is one of a number of stations which are maintained jointly by Canada and the United States. The stream is affected by regulation for irrigation purposes above this station.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	34 ^b	1,110	100	46.2	10.4	5.4	0.0	0.5	-	-
2.....	-	-	32	1,200 ^b	100	43.9	8.9	4.7	0.0	0.4	-	-
3.....	-	-	29	1,180	71	51	7.0	3.5	0.0	0.4	-	-
4.....	-	-	26	1,200	41.7	42.8	6.2	4.4	0.2	0.4	-	-
5.....	-	-	24	1,310	36.2	28.0	6.2	6.2	0.5	0.3	-	-
6.....	-	-	22	1,340	34.0	21.8	10.4	5.0	0.4	0.2	-	-
7.....	-	-	19	1,430	33.0	25.2	9.9	5.4	0.3	0.2	-	-
8.....	-	-	18	1,610	32.0	25.2	11.6	6.2	0.3	0.1	-	-
9.....	-	-	17	1,750	31.0	35.4	15.3	5.4	0.2	0.2	-	-
10.....	-	-	16	1,760	30.0	20.2	13.4	5.0	0.1	0.1	-	-
11.....	-	-	15	1,710	29.0	17.4	14.0	5.4	0.0	0.1	-	-
12.....	-	-	14	1,670	41.7	17.4	12.8	5.0	Nil	0.0	-	-
13.....	-	-	12	1,340	41.7	17.4	11.0	4.7	0.7	0.0	-	-
14.....	-	-	10	900 ^e	41.7	17.4	9.4	4.4	3.8	0.0	-	-
15.....	-	-	9 ^x	600 ^e	39.5	16.7	7.9	4.4	3.2	0.0	-	-
16.....	-	-	8	400 ^e	31.0	19.5	6.2	5.0	2.5	0.1	-	-
17.....	-	-	7	200 ^e	29.0	29.0	5.4	4.4	1.9	0.1	-	-
18.....	-	-	6	150 ^e	30.0	34.0	4.7	3.5	3.2	0.0	-	-
19.....	-	-	6	82	27.0	27.0	5.4	2.7	5.0	0.0	-	-
20.....	-	-	5 ^x	52	26.1	25.2	5.4	2.5	4.4	0.2	-	-
21.....	-	-	5	42.8	25.2	25.2	6.2	2.5	3.5	0.1	-	-
22.....	-	-	5	39.5	26.1	25.2	5.8	2.1	2.7	0.0	-	-
23.....	-	-	5	40.6	33.0	25.2	5.4	1.7	2.1	0.0	-	-
24.....	-	-	10	39.5	29.0	21.0	4.1	1.1	1.9	0.0	-	-
25.....	-	-	20	81	25.2	16.7	2.9	0.7	1.3	0.0	-	-
26.....	-	-	35	114	22.6	15.3	2.1	0.4	1.0	0.1	-	-
27.....	-	-	50	114	27.0	14.6	1.7	0.3	0.7	0.0	-	-
28.....	-	-	71	112	39.5	11.6	1.1	0.3	0.6	0.1	-	-
29.....	-	-	238	109	37.3	9.9	1.3	0.3	0.5	0.0	-	-
30.....	-	-	568	102	34.0	9.9	7.9	0.3	0.5	0.0	-	-
31.....	-	-	858	-	35.1	-	8.4	0.2	-	0.0	-	-
Mean	-	-	70.8	726	38.1	24.5	7.37	3.33	1.38	0.12	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	4,350	43,220	2,340	1,460	453	204	82	7.1	-	-

The Period..... Discharge: Daily - Maximum 10 April, 1,760
 (245 days) - Minimum 12 September, Nil
 Instantaneous Maximum 1 a.m., 10 April, 1,780
 Mean 107
 Runoff: Acre-feet 52,120

b - Ice conditions 1 March to 2 April.

x - Staff gauge readings.

e - Estimated.

EASTEND RESERVOIR - STATION No. 11AC₅₅

(International Gauging Station)

Location: Lat. 49° 30' 20", long. 108° 51' 10", in NW. 1/4 sec. 25, tp. 6, rge. 22, W. 3rd Mer., Saskatchewan, on Frenchman River about one and one-half miles west of Eastend. Gauge: Wire-weight and staff. Period of Record: Irrigation seasons, 1937 to date. Extremes Recorded: Maximum, 12:30 p.m., 15 April 1952 (elevation 3,015 feet), 3,900 acre-feet. Dam overtopped at this time. Revisions: Data to 1950 inclusive were reviewed in co-operation with the United States Geological Survey and revised data are available upon application to the District Engineer at Calgary, for address see page 8. Remarks: This is one of a number of stations which are maintained jointly by Canada and the United States. Records prior to 1947 collected by Canada only. The earth-fill dam was breached after overtopping at peak of 1952 flood and was repaired in the fall of 1952. Water is impounded on Frenchman River for use in irrigation projects downstream or diversion to Eastend Canal. Elevations are referred to G.S.C. datum.

Elevations in Feet and Contents in Acre-feet for Calendar Year 1958

Month	Elevation at End of Month	Contents at End of Month	Change in Contents During Month
January	-	-	-
February	3,003.28	514	-
March	3,004.48	647	+ 133
April	3,010.99	2,050	+1,403
May	3,009.11	1,470	- 580
June	3,006.66	956	- 514
July	3,007.22	1,050	+ 94
August	3,004.81	686	- 364
September	3,004.50	649	- 37
October	3,004.64	664	+ 15
November	-	-	-
December	-	-	-
The Period	-	-	+ 150

VAL MARIE WEST RESERVOIR - STATION No. 11AC₆₃

(International Gauging Station)

Location: Lat. 49° 22', long. 107° 53', in SE, 1/4 sec. 12, tp. 5, rge. 15, W. 3rd Mer., Saskatchewan, on Frenchman River about fourteen miles northwest of Val Marie and immediately above Val Marie Reservoir. Gauge: Wire-weight. Period of Record: Irrigation seasons 1940 to date. Extremes Recorded: Maximum, 18 April 1952 (elevation 2,676.50 feet) 4,340 acre-feet. Revisions: Data to 1950 inclusive were reviewed in co-operation with the United States Geological Survey and revised data are available upon application to the District Engineer at Calgary, for address see page 8. Revised data for 1951 may also be obtained from the Calgary District office. Remarks: This is one of a number of stations which are maintained jointly by Canada and the United States. Prior to 1947, records were collected by Canada only. Elevations are referred to the top of the north wingwall of dam, elevation 2,676.65 feet. Water is impounded on Frenchman River for diversion to the West Val Marie Irrigation District via Val Marie West Gravity and Val Marie West Pumping canals.

Elevations in Feet and Contents in Acre-feet for Calendar Year 1958

Month	Elevation at End of Month	Contents at End of Month	Change in Contents During Month
January	-	-	-
February	2,667.88	867	-
March	2,669.94	1,530	+ 663
April	2,672.48	2,460	+ 930
May	2,669.89	1,510	- 950
June	2,670.58	1,750	+ 240
July	2,668.68	1,090	- 660
August	2,668.56	1,060	- 30
September	2,668.78	1,130	+ 70
October	2,670.12	1,590	+ 460
November	-	-	-
December	-	-	-
The Period	-	-	+ 723

(International Gauging Station)

Location: Lat. 49° 18', long. 107° 48', in NE. 1/4 sec. 15, tp. 4, rge. 14, W. 3rd Mer., Saskatchewan, on Frenchman River about seven miles northwest of Val Marie. **Gauge:** Wire-weight. **Period of Record:** Irrigation seasons 1937 to date. **Extremes Recorded:** Maximum, 19 April 1952 (elevation 2,638.80 feet), 16,220 acre-feet. **Revisions:** Data to 1950 inclusive were reviewed in co-operation with the United States Geological Survey and revised data are available upon application to the District Engineer at Calgary, for address see page 8. Revised data for 1951, may also be obtained from the Calgary District office. **Remarks:** This is one of a number of stations which are maintained jointly by Canada and the United States. Prior to 1947, records were collected by Canada only. Elevations are referred to mark "W 1936" on southwest wingwall of dam, elevation 2,638.97 feet. Water is impounded on the Frenchman River for diversion to the Val Marie Irrigation District via the Val Marie Main Canal.

Elevations in Feet and Contents in Acre-feet for Calendar Year 1958

Month	Elevation at End of Month	Contents at End of Month	Change in Contents during Month
January.....	-	-	-
February.....	2,632.15	6,910	-
March.....	2,634.99	10,340	+3,430
April.....	2,636.36	12,320	+1,980
May.....	2,634.90	10,220	-2,100
June.....	2,632.59	7,380	-2,840
July.....	2,630.27	5,160	-2,220
August.....	2,627.83	3,480	-1,680
September.....	2,626.82	2,980	- 500
October.....	2,626.67	2,910	- 70
November.....	-	-	-
December.....	-	-	-
The Period.....	-	-	-4,000

(International Gauging Station)

Location: Lat. 49° 30', long. 109° 22', in SW. 1/4 sec. 30, tp. 6, rge. 25, W. 3rd Mer., Saskatchewan, on diversion canal about one and one-half miles above Cypress Lake East Dam and about twelve miles north of Vidora. Gauge: Recording. Measurement of Discharge: From bridge or by wading. Period of Record: March to October, 1946 to date. Extremes Recorded: Daily - Maximum, 29 April 1951, 555 cfs; Instantaneous Maximum - 5 a.m., 30 April 1951, 647 cfs. Revisions: 1946, W.R.P. 121. Data to 1950 inclusive were reviewed in co-operation with the United States Geological Survey and no revisions were found necessary. Remarks: Records good. This is one of a number of stations which are maintained jointly by Canada and the United States. Prior to 1947, records were collected by Canada only. Discharge records for the seasons 1939 to 1945 were published under the title: "Cypress Lake East Inflow Canal" and were obtained by combining records from three other stations. They were not equivalent to present records because they contained the discharge of Sucker Creek, which enters the canal below the present station.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	Nil	149	Nil	Nil	Nil	Nil	Nil	Nil	-	-
2.....	-	-	"	217	"	"	"	"	"	"	-	-
3.....	-	-	"	238	"	"	"	"	"	"	-	-
4.....	-	-	"	311	"	"	"	"	"	"	-	-
5.....	-	-	"	175	"	"	"	"	"	"	-	-
6.....	-	-	"	108	"	"	"	"	"	"	-	-
7.....	-	-	"	137	"	"	"	"	"	"	-	-
8.....	-	-	"	114	"	"	"	"	"	"	-	-
9.....	-	-	"	76	"	"	"	"	"	"	-	-
10.....	-	-	"	37.0	"	"	"	"	"	"	-	-
11.....	-	-	"	22.0	"	"	"	"	"	"	-	-
12.....	-	-	"	14.6	"	"	"	"	"	"	-	-
13.....	-	-	"	11.8	"	"	"	"	"	"	-	-
14.....	-	-	"	16.8	"	"	"	"	"	"	-	-
15.....	-	-	"	17.7	"	"	"	"	"	"	-	-
16.....	-	-	"	12.8	"	"	"	"	"	"	-	-
17.....	-	-	"	8.4	"	"	"	"	"	"	-	-
18.....	-	-	"	10.8	"	"	"	"	"	"	-	-
19.....	-	-	"	7.6	"	"	"	"	"	"	-	-
20.....	-	Nil	"	6.9	"	"	"	"	"	"	-	-
21.....	-	"	"	7.2	"	"	"	"	"	"	-	-
22.....	-	"	"	6.0	"	"	"	"	"	"	-	-
23.....	-	"	"	6.0	"	"	"	"	"	"	-	-
24.....	-	"	"	5.6	"	"	"	"	"	"	-	-
25.....	-	"	"	5.4	"	"	"	"	"	"	-	-
26.....	-	"	"	5.6	"	"	"	"	"	"	-	-
27.....	-	"	"	6.7	"	"	"	"	"	"	-	-
28.....	-	"	"	6.3	"	"	"	"	"	"	-	-
29.....	-	-	"	6.9	"	"	"	"	"	"	-	-
30.....	-	-	"	4.2	"	"	"	"	"	"	-	-
31.....	-	-	13.6	-	"	-	"	"	-	"	-	-
Mean	-	-	0.44	58.4	Nil	Nil	Nil	Nil	Nil	Nil	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	27	3,470	Nil	Nil	Nil	Nil	Nil	Nil	-	-

The Period..... Discharge: Daily - Maximum, 4 April, 311
(245 days) Runoff: Acre-feet 3,500

(International Gauging Station)

Source: Cypress Lake. Location: Lat. 49° 29', long. 109° 21', in sec. 19, tp. 6, rge. 25, W. 3rd Mer., Saskatchewan, about two miles below Cypress Lake East Dam, five hundred feet above confluence with Belanger Creek and twelve miles north of Vidora. Gauge: Recording. Measurement of Discharge: From footbridge or by wading. Period of Record: Irrigation seasons 1940 to date. Extremes Recorded: Daily - Maximum, 19 April 1952, 202 cfs; Instantaneous Maximum - 15 April 1952, 266 cfs (with canal banks flooded). Revisions: Data to 1950 inclusive were reviewed in co-operation with the United States Geological Survey and revised data are available upon application to the District Engineer at Calgary, for address see page 8. Remarks: Records fair. This is one of a number of stations which are maintained jointly by Canada and the United States. The canal is used to return water from Cypress Lake to the Frenchman River basin. Prior to 1947, records were collected by Canada only.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	1	57x	1.5	12.8	2.6	92	0.2	0.2	1.6	-
2.....	-	-	1	30b	1.3	11.8	2.4	91	0.2	0.2	1.5	-
3.....	-	-	1	10.0e	1.1	10.7	2.4	91	0.1	0.3	1.6	-
4.....	-	-	1	10.0	0.9e	15.7	2.4	91	0.1	0.4	-	-
5.....	-	-	1	10.0	0.7	18.8	2.2	90	0.1	0.4	-	-
6.....	-	-	1	10.0	0.6	17.0	2.4	80	0.1	0.6	-	-
7.....	-	-	1	10.0	0.6	17.4	3.1	1.8	0.1	0.6	-	-
8.....	-	-	1	10.0	0.5	16.0	4.4	0.2	0.1	0.7	-	-
9.....	-	-	1	12.0	0.4	113	4.4	0.2	0.1	0.8	-	-
10.....	-	-	1	14.0e	0.4	172	8.8	0.2	0.1	0.9	-	-
11.....	-	-	1	16.4x	0.3	122	28.7	0.2	0.1	1.1	-	-
12.....	-	-	1	18.0e	0.3	53	33.9	0.2	0.0	1.3	-	-
13.....	-	-	2	20.0e	0.2	8.4	42.2	0.3	0.0	1.3	-	-
14.....	-	-	2	100e	0.2	1.7	41.1	0.3	0.0	1.5	-	-
15.....	-	-	2	57x	0.2	2.4	41.6	0.4	0.1	1.5	-	-
16.....	-	-	2	36.9x	0.2	2.0	41.1	20.0	0.1	1.5	-	-
17.....	-	-	2	20.0e	0.2	1.4	39.5	50	0.1	1.5	-	-
18.....	-	-	2	10.0e	0.1	0.8	39.5	48.9	0.0	1.6	-	-
19.....	-	-	2	5.0e	0.1	0.7	38.5	46.6	0.0	1.4	-	-
20.....	-	1b	2	4.0e	0.1	0.7	37.5	46.0	0.0	1.7	-	-
21.....	-	1	2	3.5e	0.1	0.7	42.4	46.0	0.0	1.6	-	-
22.....	-	1	2	3.2x	0.1	0.7	74	23.4	0.0	1.5	-	-
23.....	-	1	2	3.0e	0.1	1.8	75	0.8	0.1	1.6	-	-
24.....	-	1	2	2.8	0.0	1.8	73	0.8	0.1	1.6	-	-
25.....	-	1	2	2.6	0.0	0.9	73	1.0	0.1	1.6	-	-
26.....	-	1	2	2.4	0.0	1.0	71	0.8	0.1	1.6	-	-
27.....	-	1	2	2.2	0.0	1.1	70	0.6	0.1	1.6	-	-
28.....	-	1	2	2.0	0.0	1.5	71	0.5	0.1	1.6	-	-
29.....	-	-	2	1.9	0.1	2.4	91	0.5	0.2	1.6	-	-
30.....	-	-	2	1.7	12.5	2.4	92	0.4	0.2	1.6	-	-
31.....	-	-	2	-	12.8	-	92	0.3	-	1.6	-	-
Mean	-	-	1.61	16.2e	1.15	20.4	40.1	26.6	0.09	1.19	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	99	963	71	1,220	2,470	1,640	5.2	73	-	-

The Period..... Discharge: Daily - Maximum 10 June, 172
 (245 days) Instantaneous Maximum 11 a.m., 10 June, 206
 Runoff: Acre-feet 6,540

b - Ice conditions 20 February to 2 April.
 x - Staff gauge readings.

e - Estimated 3 to 10 April, 23 April to 4 May and as indicated.

(International Gauging Station)

Source: Frenchman River. Location: Lat. 49° 30' 20", long. 108° 51' 10", in NW. 1/4 sec. 25, tp. 6, rge. 22, W. 3rd Mer., Saskatchewan; about fifty feet below headgate at Eastend Reservoir and about one and one-half miles west of Eastend. Gauge: Recording. Measurement of Discharge: From footbridge or by wading. Period of Record: Irrigation seasons, 1937 to date. Records prior to 1941 collected at site in SW. 1/4 sec. 31, tp. 6, rge. 21 and did not include minor diversion for town of East End. Records from 1941 to 1949 collected about one-half mile below present site and above Town diversion. Extremes Recorded: Daily - Maximum, 11 and 12 May 1949, 62 cfs; Instantaneous Maximum - 4 a.m., 11 May 1949, 63 cfs. Revisions: Data to 1950 inclusive were reviewed in co-operation with the United States Geological Survey and revised data are available upon application to the District Engineer at Calgary, for address see page 8. Remarks: Records excellent. This is one of a number of stations which are maintained jointly by Canada and the United States. Prior to 1947 records were collected by Canada only. The canal was not used during 1952 for irrigation purposes, although it was filled to capacity during 1952 flood, after Eastend Reservoir dam overtopped. There is no record of this flow, which returned to Frenchman River through washouts in canals or wasteways.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	Nil	0.0	0.0	48.5	32.3	36.7	0.0	Nil	-	-
2.....	-	-	"	0.0	0.0	48.0	28.7	36.7	0.0	"	-	-
3.....	-	-	"	0.0	0.0	47.6	25.0	36.7	0.0	"	-	-
4.....	-	-	"	0.0	0.0	47.2	22.5	36.3	0.0	"	-	-
5.....	-	-	"	0.0b	0.0	47.2	19.4	35.9	0.0	"	-	-
6.....	-	-	"	Nil e	0.0	49.7	18.2	35.5	0.0	"	-	-
7.....	-	-	"	"	0.0	49.3	14.4	35.5	0.0	"	-	-
8.....	-	-	"	"	0.0	49.3	9.9	39.6	0.0	"	-	-
9.....	-	-	"	"	0.0	49.7	9.7	25.4	Nil	"	-	-
10.....	-	-	"	"	0.0	44.2	3.4	9.7	"	"	-	-
11.....	-	-	"	"	0.0	45.5	0.0	9.7	"	"	-	-
12.....	-	-	"	"	0.0	47.6	0.0	16.1	"	"	-	-
13.....	-	-	"	0.0	0.0	45.9	0.0	28.3	"	"	-	-
14.....	-	-	"	0.0	0.0	43.8	0.0	29.4	"	"	-	-
15.....	-	-	"	0.0e	0.0	43.0	0.0	26.7	"	"	-	-
16.....	-	-	"	5.4	0.0	40.9	0.0	19.0	"	"	-	-
17.....	-	-	"	11.0	0.0	36.7	0.0	12.2	"	"	-	-
18.....	-	-	"	11.0	0.0	25.7	1.0	11.6	"	"	-	-
19.....	-	-	"	9.2	6.8	23.4	11.7	11.6	"	"	-	-
20.....	-	-	"	0.0e	15.6	23.4	16.1	19.4	"	"	-	-
21.....	-	-	"	0.0e	20.0	23.4	24.3	24.4	"	"	-	-
22.....	-	Nil b	"	0.0	22.2	23.4	29.4	23.1	"	"	-	-
23.....	-	"	"	0.0	29.7	23.4	28.0	23.1	"	"	-	-
24.....	-	"	"	0.0	40.4	23.4	28.3	22.5	"	"	-	-
25.....	-	"	"	0.0	45.1	23.1	31.9	15.8	"	"	-	-
26.....	-	"	"	0.0	48.9	28.0	37.1	9.1	"	"	-	-
27.....	-	"	"	0.0	50	32.3	36.3	6.2	"	"	-	-
28.....	-	"	"	0.0	49.7	33.1	37.1	6.2	"	"	-	-
29.....	-	-	0.0	0.0	48.9	32.3	37.5	2.0	"	"	-	-
30.....	-	-	0.0	0.0	48.5	32.3	37.1	0.0	"	"	-	-
31.....	-	-	0.0	-	49.3	-	36.7	0.0	-	"	-	-
Mean	-	-	0.00	1.22e	15.3	37.7	18.6	20.8	0.00	Nil	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	0.0	73	942	2,240	1,140	1,280	0.0	Nil	-	-

The Period.....Discharge: Daily - Maximum 27 May, 50
 (245 days) Instantaneous Maximum 7 p.m., 26 May, 51
 Runoff: Acre-feet 5,680

b - Ice conditions 22 February to 5 April.

e - Estimated 6 to 15 April and as indicated.

Source: Frenchman River. Location: Lat. 49° 22', long. 107° 53', in NW. 1/4 sec. 7, tp. 5, rge. 14, W. 3rd Mer., Saskatchewan, at head of canal and about one-quarter mile north of Val Marie West Gravity Canal station and fourteen miles northwest of Val Marie. Water is delivered to canal by pumping from Val Marie West Reservoir. Gauge: Recording. Measurement of Discharge: From footbridge or by wading. Period of Record: Irrigation seasons 1950 to date. Extremes Recorded: Daily - Maximum, 8 July 1958, 23.6 cfs. Remarks: Records good. Prior to 1956, records were obtained from occasional discharge measurements and records of periods of pump operation supplied by P.F.R.A.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	Nil	Nil	Nil	8.1	Nil	10.6	Nil	0.0	-	-
2.....	-	-	"	"	"	10.4	"	11.2	"	Nil	-	-
3.....	-	-	"	"	"	11.8	"	11.4	"	"	-	-
4.....	-	-	"	"	"	11.9	"	11.6	"	"	-	-
5.....	-	-	"	"	"	11.8	13.2	11.8	"	"	-	-
6.....	-	-	"	"	0.4	11.8	12.0	7.9	"	"	-	-
7.....	-	-	"	"	0.1	11.9	19.8	7.0	"	"	-	-
8.....	-	-	"	"	Nil	11.9	23.6	7.4	"	"	-	-
9.....	-	-	"	"	7.5	12.8	23.4	4.4	"	"	-	-
10.....	-	-	"	"	4.4	20.5	22.9	Nil	"	"	-	-
11.....	-	-	"	"	0.1	20.3	23.2	10.8	"	"	-	-
12.....	-	-	"	"	Nil	11.8	23.2	8.8	"	"	-	-
13.....	-	-	"	"	0.4	4.7	22.6	Nil	"	"	-	-
14.....	-	-	"	"	2.4	2.4	22.6	"	"	"	-	-
15.....	-	-	"	"	5.4	Nil	22.4	"	"	"	-	-
16.....	-	-	"	"	16.6	6.3	22.6	"	"	"	-	-
17.....	-	-	"	"	21.7	6.0	22.0	"	"	"	-	-
18.....	-	-	"	"	21.6	4.9	18.4	"	"	"	-	-
19.....	-	-	"	"	21.7	4.9	22.8	"	"	"	-	-
20.....	-	-	"	"	21.9	4.3	21.7	"	"	"	-	-
21.....	-	-	"	"	22.0	Nil	12.4	"	"	"	-	-
22.....	-	-	"	"	21.7	"	12.5	"	"	"	-	-
23.....	-	-	"	"	22.3	"	12.4	"	"	"	-	-
24.....	-	-	"	"	22.2	"	12.2	"	"	"	-	-
25.....	-	-	"	"	22.0	"	15.4	"	"	"	-	-
26.....	-	Nil	"	"	22.0	"	19.2	"	"	"	-	-
27.....	-	"	"	"	21.6	"	18.0	"	"	"	-	-
28.....	-	"	"	"	22.6	"	10.5	"	"	"	-	-
29.....	-	-	"	"	22.3	"	10.2	"	"	"	-	-
30.....	-	-	"	"	21.9	"	10.2	"	4.9	"	-	-
31.....	-	-	"	-	22.2	-	10.3	"	-	"	-	-
Mean	-	-	Nil	Nil	11.8	6.28	15.5	3.32	0.16	0.00	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	Nil	Nil	728	374	951	204	9.7	0.0	-	-

The Period..... Discharge: Daily - Maximum 8 July, 23.6
 (245 days) Instantaneous Maximum 6 a.m., 8 July, 23.8
 Runoff: Acre-feet 2,270

VAL MARIE WEST GRAVITY CANAL - STATION No. 11AC₆₅

(International Gauging Station)

Source: Frenchman River. Location: Lat. 49° 22', long. 107° 53', in SW. 1/4 sec. 7, tp. 5, rge. 14, W. 3rd Mer., Saskatchewan, immediately below headgate on gravity outlet from Val Marie West Reservoir and about fourteen miles northwest of Val Marie. Gauge: Recording. Measurement of Discharge: From footbridge or by wading. Period of Record: Irrigation seasons 1946 to date. Prior to 1950 records were obtained about one-half mile downstream. Extremes Recorded: Daily - Maximum, 22 May 1958, 52 cfs. Revisions: Data to 1950 inclusive were reviewed in co-operation with the United States Geological Survey and no revisions were found necessary. Remarks: Records poor. This is one of a number of stations which are maintained jointly by Canada and the United States. Prior to 1947, records were collected by Canada only.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	Nil	Nil	Nil	9.2	Nil	9.0	1.0	Nil	-	-
2.....	-	-	"	"	"	10.1	"	9.6	0.8	Nil	-	-
3.....	-	-	"	"	"	8.8	"	10.1	0.7	0.0	-	-
4.....	-	-	"	"	"	6.0	"	7.5	0.6	0.0	-	-
5.....	-	-	"	"	"	6.0	"	5.0	0.6	0.0	-	-
6.....	-	-	"	"	"	6.0	"	5.3	0.5	0.0	-	-
7.....	-	-	"	"	"	6.1	4.1	13.7	0.5	0.0	-	-
8.....	-	-	"	"	"	7.1	14.4	14.0	0.5	Nil	-	-
9.....	-	-	"	"	"	7.5	14.8	16.9	0.5	"	-	-
10.....	-	-	"	"	"	7.5	14.6	19.2	0.4	"	-	-
11.....	-	-	"	"	"	4.8	9.5	19.2	0.3e	"	-	-
12.....	-	-	"	"	"	4.5	9.2	19.9	0.3e	"	-	-
13.....	-	-	"	"	"	4.7	7.9	16.3	0.2e	"	-	-
14.....	-	-	"	"	"	3.8	8.5	13.7	0.2e	"	-	-
15.....	-	-	"	"	"	5.4	6.2	13.0	0.1e	"	-	-
16.....	-	-	"	"	"	6.5	8.8	13.2	0.1e	"	-	-
17.....	-	-	"	"	"	6.5	7.1	11.4	0.0e	"	-	-
18.....	-	-	"	"	1.2	6.5	8.5	10.6	0.0	"	-	-
19.....	-	-	"	"	25.0	5.9	7.5	7.6	0.0	0.0	-	-
20.....	-	-	"	"	32.7	1.7	6.3	5.1	0.0	0.0	-	-
21.....	-	-	"	"	41.4	Nil	5.0	5.0	0.0	0.0	-	-
22.....	-	-	"	"	52	"	4.7	5.0	0.0	0.0	-	-
23.....	-	-	"	"	50	"	4.8	4.8	0.0	0.0	-	-
24.....	-	-	"	"	42.4	"	4.6	4.7	0.0	0.0	-	-
25.....	-	-	"	"	38.6	"	3.7	4.3	0.0	Nil	-	-
26.....	-	Nil	"	"	35.3	"	2.7	4.4	0.0	0.0	-	-
27.....	-	"	"	"	26.3	"	1.4	4.3	0.0	0.1	-	-
28.....	-	"	"	"	24.0	"	1.9	4.2	0.0	0.1	-	-
29.....	-	-	"	"	18.6	"	3.9	9.2	Nil	0.1e	-	-
30.....	-	-	"	"	12.4	"	5.8	7.2	Nil	0.1e	-	-
31.....	-	-	"	-	10.8	-	8.3	1.6	-	0.0e	-	-
Mean	-	-	Nil	Nil	13.2	4.15	5.62	9.52	0.24	0.01	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	Nil	Nil	815	247	346	585	14	0.8	-	-

The Period..... Discharge: Daily - Maximum 22 May, 52
 (245 days) Instantaneous Maximum 7 a.m., 22 May, 53
 Runoff: Acre-feet 2,010

e - Estimated.

(International Gauging Station)

Source: Frenchman River. Location: Lat. 49° 18', long. 107° 45' 30", in NE. 1/4 sec. 13, tp. 4, rge. 14, W. 3rd Mer., Saskatchewan, immediately below Drop No. 1 and about two miles below headgate at Val Marie Reservoir, near Val Marie. Gauge: Recording. Measurement of Discharge: From bridge or by wading. Period of Record: Irrigation seasons 1937 to date. Prior to October 1939, records were obtained in NE. 1/4 sec. 14, about one mile below the dam and above a check structure, erroneously called "Drop No. 1" in former publications. All descriptions of the location of this station prior to W.R.P. 117 contain some error. Extremes Recorded: Daily - Maximum, 2 and 3 June 1951, 90 cfs; Instantaneous Maximum - 11 p.m., 16 August 1954, 158 cfs. Revisions: Data to 1950 inclusive were reviewed in co-operation with the United States Geological Survey and revised data are available upon application to the District Engineer at Calgary, for address see page 8. Remarks: Records poor. This is one of a number of stations which are maintained jointly by Canada and the United States. Prior to 1947, records were collected by Canada only. Water is sometimes diverted from the canal above the gauging station. Estimated amount of such diversion in 1958 was 383 acre-feet.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	Nil	Nil	Nil	61	17.1	54	4.9	Nil	-	-
2.....	-	-	"	"	"	44.1	20.0	53	4.7	"	-	-
3.....	-	-	"	"	"	38.6	30.4	52	4.4	"	-	-
4.....	-	-	"	"	"	37.8	33.4	50	4.4	"	-	-
5.....	-	-	"	"	"	37.8	29.5	49.4	7.7	"	-	-
6.....	-	-	"	"	"	38.2	22.3	47.9	0.1e	"	-	-
7.....	-	-	"	"	"	39.1	22.3	46.5	0.0e	"	-	-
8.....	-	-	"	"	"	40.4	22.3	45.0	0.0	"	-	-
9.....	-	-	"	"	14.8	39.6	18.2	40.4	0.0e	"	-	-
10.....	-	-	"	"	31.6	40.9	9.3	40.0		"	-	-
11.....	-	-	"	"	32.1	46.0	2.3	36.4		"	-	-
12.....	-	-	"	"	39.7	48.9	4.7	32.5	0.0e	"	-	-
13.....	-	-	"	"	40.9	47.9	2.8	30.4		"	-	-
14.....	-	-	"	"	43.6	47.9	2.1	30.8		"	-	-
15.....	-	-	"	"	48.9	47.9	2.1	31.6	0.0	"	-	-
16.....	-	-	"	"	48.9	42.7	1.6	32.1		"	-	-
17.....	-	-	"	"	48.9	43.6	0.5	32.1		"	-	-
18.....	-	-	"	"	51	35.1	1.4	32.5	0.0e	"	-	-
19.....	-	-	"	"	62	34.2	15.4	33.8		"	-	-
20.....	-	-	"	"	70	30.4	17.4	34.7		"	-	-
21.....	-	-	"	"	72	21.9	25.4	34.7	0.0e	"	-	-
22.....	-	-	"	"	76	21.5	40.8	35.6		"	-	-
23.....	-	-	"	"	82	21.1	47.9	35.6		"	-	-
24.....	-	-	"	"	73	20.8	53	34.3	Nil e	"	-	-
25.....	-	-	"	"	65	20.4	53	7.9		"	-	-
26.....	-	Nil	"	"	67	19.6	54	7.9		"	-	-
27.....	-	"	"	"	67	19.3	55	7.9	Nil	"	-	-
28.....	-	"	"	"	70	17.8	57	8.5		"	-	-
29.....	-	-	"	"	68	17.4	56	7.2		"	-	-
30.....	-	-	"	"	67	17.4	55	4.9	Nil	"	-	-
31.....	-	-	"	-	67	-	55	4.9	-	"	-	-
Mean	-	-	Nil	Nil	42.1	34.6	26.7	32.1	0.87e	Nil	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	Nil	Nil	2,590	2,060	1,640	1,970	52	Nil	-	-

The Period..... Discharge: Daily - Maximum 23 May, 82
 (245 days) Instantaneous Maximum 1 a.m., 23 May, 87
 Runoff: Acre-feet 8,310

e - Estimated.

458 MISCELLANEOUS DISCHARGE MEASUREMENTS MADE IN FRENCHMAN RIVER TRIBUTARY BASIN
FOR THE YEAR 1958

Date	Stream	Location	Discharge cfs
21 July	Val Marie Main Drain	Sec. 9, tp. 3, rge. 13, W. 3rd Mer.	4.0e
28 July	"	"	7.0e
7 Aug.	"	"	7.0e
1 Sept.	"	"	0.2e
10 Sept.	"	"	0.1e
18 Sept.	"	"	0.0e
30 Sept.	"	"	0.0e
10 Oct.	"	"	0.0e
1 Nov.	"	"	0.0e
21 July	Val Marie West Drain	Sec. 3, tp. 5, rge. 14, W. 3rd Mer.	3.5e
28 July	"	"	2.5e
7 Aug.	"	"	Nil
19 Aug.	"	"	5.0e
29 Aug.	"	"	3.5e
8 Sept.	"	"	0.3e
18 Sept.	"	"	0.0e
30 Sept.	"	"	Nil
10 Oct.	"	"	Nil
28 Oct.	"	"	Nil

e - Estimated.

MISCELLANEOUS DIVERSIONS MADE IN FRENCHMAN RIVER TRIBUTARY BASIN
FOR THE YEAR 1958

Ditch Owner	Location	Diverting From	Approx. Acre- feet Diverted
Agar, E.	NW. 20-7-24-3	A Coulee	18
Archer, F.	SE. 27-7-25-3	A Coulee	10
Archer, R. R.	SW. 18-7-24-3	A Coulee	2
Armstrong, J. C.	W. 1/2 4-8-24-3	Armstrong Creek	31
Arnal, G. C.	NE. 27-7-24-3	A Coulee	6
Bascom, M. A.	SW. 4-6-20-3	Frenchman River	20
Bate, J. F. & A. B.	SW. 7-6-16-3	Fountain Creek	4
Bock, C. L.	SW. 31-6-20-3	A Coulee	10
Bock, C. L. & W. G.	SW. 31-6-20-3	A Coulee	10
Bock, H.	SE. 36-6-21-3	A Coulee	8
Bock, W. G.	NW. 36-6-21-3	A Coulee	2
Breton, L.	SW. & NW. 11-7-22-3	A Coulee	9
Brooks, H.	NW. 28-4-12-3	A Coulee	8
Brost, D. C. & E.	NW. 16-7-27-3		
	20/21-6-27-3	Oxart Creek	350
Brost, D. C. & E.	NW. 14-7-27-3	War Lodge Creek	15
Bryan, G. M.	22/23-8-26-3	A Coulee	25
Bryan, W. G.	10/11-8-26-3	A Coulee	8
Busse, J. P.	NE. 9-5-19-3		
	SW. 16-5-19-3	Chamberry Coulee	15
Caton Cattle Co. Ltd.	SW. 13-6-25-3	Moirvale Creek	100
Caton Cattle Co. Ltd.	SW. 31-6-24-3	Fairwell Creek	146
Cypress Cattle Co. Ltd.	SW. 30-6-25-3	Belanger Creek	35
Cypress Cattle Co. Ltd.	SW. 30-6-25-3	Belanger Creek	35
Cypress Cattle Co. Ltd.	SE. 25-6-26-3		
	SW. 30-6-25-3	Belanger Creek	73
Cypress Cattle Co. Ltd.	NW. 29-6-25-3	Davis Creek	12
Cypress Cattle Co. Ltd.	NW. 29-6-25-3	Davis Creek	53
Cypress Cattle Co. Ltd.	W. 1/2 24-6-26-3	Sucker Creek	23
Cypress Cattle Co. Ltd.	SE. 14-6-25-3	Moirvale Coulee	20
Dixon, H. L.	NW. 2-2-11-3	Breed Creek	25
Field, L. W.	SE. 31-5-21-3	Galliene Coulee	28
Fleming, L. I.	SE. 26-8-26-3	A Coulee	15
Fordice, E. S.	NW. 18-7-25-3	Belanger Creek	57
Fordice, L. E. & E. S.	NW. 19-7-25-3	A Coulee	8
Freel, R. F.	NW. 24-6-23-3	Frenchman River	15
Greenlay, G. L.	NE. 33-4-17-3	A Coulee	13
Guitton, F.	NE. 26-6-20-3	A Coulee	3
Hanson, E.	SE. 15-6-20-3	A Coulee	8

MISCELLANEOUS DIVERSIONS MADE IN FRENCHMAN RIVER TRIBUTARY BASIN
FOR THE YEAR 1958 (Continued)

459

Ditch Owner	Location	Diverting From	Approx. Acre- feet Diverted
Hewitt, H.	SE. 27-7-26-3	Lone Pine Creek	30
Hewitt, H.	NE. 28-7-26-3	Lone Pine Creek	33
Hewitt, S. W.	NW. 22-7-26-3	A Coulee	10
Howard, J.	NE. 7-7-22-3	Bolingbroke Creek	4
Howard, J. & E. H.	NW. 2-7-23-3	Concrete Coulee	28
Kunzli, H.	SE. 27-6-21-3	Outlaw Coulee	45
Larson, L. E.	NE. 25-6-20-3	A Coulee	3
Larson, W. C.	33/34-2-12-3	Little Pinto Creek	18
Larson, W. C.	NE. 35-2-12-3	A Creek	23
Larson, W. C.	SW. 4-3-12-3	A Creek	30
Larson, W. C.	NE. 34-2-12-3	A Coulee	20
Lewis, W. H.	SE. 28-6-21-3	Frenchman River	2
Mattson, C. O.	W. 1/2 5-4-12-3	A Coulee	11
McNabb, J. E.	NW. 24-1-11-3		
	SE. 27-1-11-3	Frenchman River	15
Monvoisin, J.	SE. 2-3-10-3	A Coulee	6
Monvoisin, J.	NW. 3-3-10-3	A Coulee	10
Monvoisin, J.	SW. 2-3-10-3	A Coulee	5
Nadeau, O.	NW. 2-4-13-3	E. Br. Denniel Creek	10
Olson, E. J.	SE. 7-4-12-3	A Coulee	6
Olson, F.	16/17-4-12-3	E. Br. Denniel Creek	43
Pearson, A.	SE. 15-6-23-3	A Coulee	3
Pearson, A.	N. 1/2 22-6-23-3	Frenchman River	38
Persson, H.	NW. 33-6-22-3	A Coulee	4
Robinson, H.	SW. 26-6-20-3	A Coulee	4
Saville, W. G.	NW. 10-7-24-3	A Coulee	30
Stredwick, R. S.	SE. 27-6-22-3	Frenchman River	43
Sunde, E.	NW. 2-8-25-3	A Coulee	23
Sunde, E.	NE. 3-8-25-3	Willow Creek	18
Topham, I. S.	N. 1/2 8-7-22-3	N. Br. Frenchman River	53
	SE. 17-7-22-3		
Way, R. J.	NW. 10-1-10-3	Molstead Creek	20
White, C. D.	NE. 20-5-17-3	Horse Camp Coulee	8
White, C. D. & B.	NW. 33-5-17-3	Mule Creek	15
White, F. J.	SW. 36-5-17-3	McDonald Coulee	5
White, F. J.	NE. 23-5-17-3	A Coulee	13
White, W. F.	SE. 5-8-22-3	Galf Creek	35
Whitney, A. C.	NE. 28-7-26-3	Lone Pine Creek	12
Whitney, T.	SW. 6-8-26-3	Sucker Creek	13
Whitney, T. H.	SW. 6-8-26-3	Sucker Creek	20
Williamson, F.	NE. 1-6-21-3	Eastbrook Coulee	50

ROCK CREEK AT INTERNATIONAL BOUNDARY - STATION No. 11AE_{0.2}

(International Gauging Station)

Location: Lat. 48° 59' 20", long. 106° 47' 30", in SE. 1/4 sec. 1, tp. 37 N., rge. 37 E., Montana, three-quarters of a mile south of International Boundary and about two miles above confluence with Horse Creek. Drainage Area: 242 square miles. Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: Mainly March to October, 1914 to 1915 and 1927 to date. Prior to September 1937, records were obtained by manual gauges at various locations in the vicinity. Records for 1914 and 1915 were published under the title "near Barnard". Extremes Recorded: Daily - Maximum, 15 April 1952, 2,420 cfs, Minimum, Nil at various times; Instantaneous Maximum - 5 a.m., 15 April 1952, 3,310 cfs. Revisions: 1950, W.R.P. 117. Data to 1950 inclusive were reviewed in co-operation with the United States Geological Survey and revised data are available upon application to the District Engineer at Calgary, for address see page 8. Remarks: Records good during open-water period and fair during ice period. This is one of a number of stations which are maintained jointly by the United States and Canada. Water was diverted to the Bowrey Ditch above this station in some years. Prior to 1927, records were collected by Canada only. From 1916 to 1926 records were obtained at another site below mouth of Horse Creek called "near Barnard". They are not equivalent to the records collected near the present site in 1914 and 1915.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	b	680	6.8	2.1	0.5	Nil	Nil	0.3	-	-
2.....	-	-	4 e	440b	6.8	2.1	0.4	"	"	0.3	-	-
3.....	-	-		256	6.8	2.0	0.4	"	"	0.4	-	-
4.....	-	-		161	6.8	2.1	0.5	"	"	0.4	-	-
5.....	-	-	1	93	6.8	2.4	0.5	"	"	0.4	-	-
6.....	-	-	14	51	6.8	2.6	0.4	"	"	0.4	-	-
7.....	-	-	1	32.2	6.4	2.3	0.5	"	"	0.4	-	-
8.....	-	-	0.5	25.5	6.0	2.0	0.6	"	"	0.6	-	-
9.....	-	-	0.2	22.2	6.0	1.8	0.8	"	"	0.5	-	-
10.....	-	-	0	22.9	6.0	1.6	0.8	"	"	0.6	-	-
11.....	-	-	0	19.6	5.7	1.4	0.6	"	"	0.6	-	-
12.....	-	-	0	16.1	5.1	1.4	0.6	"	"	0.6	-	-
13.....	-	-	0	13.8	4.8	1.2	0.5	"	"	0.7	-	-
14.....	-	-	0	12.7	4.4	1.2	0.6	"	"	0.7	-	-
15.....	-	-	0	10.4	4.2	1.2	0.7	"	"	1.0	-	-
16.....	-	-	0	10.0	3.9	1.0	0.6	"	"	0.9	-	-
17.....	-	-	0	9.0	3.6	0.9	0.5	"	"	0.9	-	-
18.....	-	-	2	8.5	3.6	0.9	0.7	"	"	0.9	-	-
19.....	-	-	3	8.0	3.3	1.1	0.8	"	"	0.9	-	-
20.....	-	-	0.5	8.0	3.1	0.9	0.7	"	"	1.0	-	-
21.....	-	-	0	8.5	2.8	0.9	0.7	"	"	1.0	-	-
22.....	-	-	0	9.0	2.6	1.0	0.6	"	"	1.2	-	-
23.....	-	-	0	9.4	2.4	1.0	0.4	"	"	1.2	-	-
24.....	-	-	0	8.5	2.3	0.9	0.4	"	"	1.8	-	-
25.....	-	-	0	8.5	2.4	0.9	0.3	"	"	1.5	-	-
26.....	-	-	1	7.6	2.3	0.6	0.5	"	"	1.6	-	-
27.....	-	-	2.5	7.6	2.1	0.6	0.5	"	"	1.5	-	-
28.....	-	-	17	6.8	2.1	0.6	0.4	"	"	1.4	-	-
29.....	-	-	140	6.8	1.8	0.4	0.4	"	"	1.7	-	-
30.....	-	-	380	6.4	1.7	0.4	0.0	"	0.0	1.7	-	-
31.....	-	-	800	-	1.6	-	Nil	"	-	1.7	-	-
Mean	-	-	44.5	66.0	4.23	1.32	0.51	Nil	0.00	0.93	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	2,730	3,930	260	78	32	Nil	0.0	57	-	-

The Period.....Discharge: Daily - Maximum 31 March, 800
 (245 days) - Minimum at various times, Nil
 Instantaneous Maximum 5 a.m., 31 March, 925
 Mean 14.6
 Runoff: Acre-feet 7,090

b - Ice conditions 1 March to 2 April.

e - Estimated.

(International Gauging Station)

Location: Lat. 48° 58' 10", long. 106° 49' 50", in NE. 1/4 sec. 15, tp. 37 N., rge. 37 E., Montana, one mile downstream from confluence with Horse Creek, two miles south of International Boundary and twenty-one miles northwest of Opheim. **Drainage Area:** 298 square miles. **Gauge:** Recording. **Measurement of Discharge:** From cableway or by wading. **Period of Record:** Mainly March to October, 1916 to 1926 and 1956 to date; miscellaneous measurement in 1952. **Extremes Recorded:** Daily - Maximum, 30 March 1925, 3,370 cfs, Minimum, Nil at various times; Instantaneous Maximum - 15 April 1952, 5,110 cfs (U.S.G.S. slope-area determination). **Revisions:** Data to 1950 inclusive were reviewed in co-operation with the United States Geological Survey and revised data are available upon application to the District Engineer at Calgary, for address see page 8. **Remarks:** Records good during open-water period and fair during ice period. This is one of a number of stations which are maintained jointly by the United States and Canada. Station re-established in 1956 as an international station near site of former station operated by Canada from 1916 to 1926 and called "near Barnard". The index number 11AE_{0,2} was erroneously assigned to that station. The records of this site are not to be confused with those from station called Rock Creek at International Boundary 11AE_{0,2}, which is located above the confluence with Horse Creek, nor with the records collected in 1914 and 1915 above Horse Creek and also published under the title "near Barnard". Discharge has been affected by minor diversions to irrigation projects in some years.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	12	747	7.6	2.7	0.2	0.0	0.0	Nil	-	-
2.....	-	-	7	498	7.6	2.9	0.1	0.0	Nil	"	-	-
3.....	-	-	2	288	7.9	2.7	0.1	0.0	"	"	-	-
4.....	-	-	10	180	7.9	2.4	0.2	0.0	"	"	-	-
5.....	-	-	3.5	118	7.9	2.9	0.2	0.0	"	"	-	-
6.....	-	-	0.5	75	7.6	3.4	0.2	0.0	"	"	-	-
7.....	-	-	4	51	7.2	3.6	0.2	0.0	"	"	-	-
8.....	-	-	9	37.0	6.9	3.2	0.2	0.0	"	"	-	-
9.....	-	-	0.5	30.0	6.6	2.7	0.6	0.0	"	"	-	-
10.....	-	-	0.1	28.8	6.6	2.2	0.6	0.0	"	"	-	-
11.....	-	-	0.0	25.6	6.3	1.8	0.4	Nil	"	"	-	-
12.....	-	-	0.0	21.0	5.6	1.8	0.4	"	"	"	-	-
13.....	-	-	0.0	16.8	5.0	1.8	0.1	"	"	"	-	-
14.....	-	-	0.0	14.2	5.0	1.7	0.2	"	"	"	-	-
15.....	-	-	0.0	12.4	5.0	1.7	0.3	"	"	"	-	-
16.....	-	-	0.0	11.7	4.7	1.3	0.4	"	"	"	-	-
17.....	-	-	0.0	10.3	4.2	1.0	0.3	"	"	"	-	-
18.....	-	-	0.5	8.6	3.9	1.3	0.1	"	"	"	-	-
19.....	-	-	4	7.2	3.9	1.5	0.1	"	"	0.0	-	-
20.....	-	-	3	7.6	3.9	1.3	0.1	"	"	0.0	-	-
21.....	-	-	0.5	8.2	3.4	1.3	0.1	"	"	1.0	-	-
22.....	-	-	0.2	8.6	3.2	1.2	0.1	"	"	0.7	-	-
23.....	-	-	0.1	8.6	2.9	1.2	0.1	"	"	1.0	-	-
24.....	-	-	0.0	8.9	2.0	1.0	0.1	"	"	1.3	-	-
25.....	-	5b	0.1	8.6	2.4	0.8	0.1	"	"	2.4	-	-
26.....	-	25	5	7.9	2.2	0.7	0.1	"	"	1.7	-	-
27.....	-	25	10	7.9	2.0	0.4	0.1	"	"	1.7	-	-
28.....	-	20	30	7.6	2.0	0.2	0.1	"	"	1.7	-	-
29.....	-	-	295	6.9	1.7	0.1	0.1	0.0	"	1.5	-	-
30.....	-	-	825	6.9	1.8	0.2	0.1	0.1	"	1.5	-	-
31.....	-	-	1,120b	-	1.5	-	0.1	0.0	-	1.8	-	-
Mean	-	-	75.5	75.6	4.75	1.70	0.20	0.00	0.00	0.53	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	4,650	4,500	292	101	12	0.2	0.0	32	-	-

The Period.....Discharge: Daily - Maximum 31 March, 1,120
 (245 days) - Minimum at various times, Nil
 Instantaneous Maximum 7:30 a.m., 31 March, 1,430
 Mean 19.7
 Runoff: Acre-feet 9,590

b - Ice conditions 25 February to 31 March.

(International Gauging Station)

Location: Lat. 48° 59' 20", long. 106° 50' 10", in SE. 1/4 sec. 3, tp. 37 N., rge. 37 E., Montana, about three-quarters of a mile south of International Boundary, one mile above confluence with Rock Creek and twenty miles west of West Poplar Customs Post. Drainage Area: 71 square miles. Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: Mainly March to October, 1914 to date. Prior to September 1937, records were obtained by manual gauge at various locations in the vicinity. Prior to 1927, records were published under the title "near Barnard". Extremes Recorded: Daily - Maximum, 29 March 1943, 1,080 cfs, Minimum - Nil at various times. Instantaneous Maximum - 4 a.m., 15 April 1952, 1,800 cfs. Revisions: Data to 1950 inclusive were reviewed in co-operation with the United States Geological Survey and revised data are available upon application to the District Engineer at Calgary, for address see page 8. Remarks: Records fair. This is one of a number of stations which are maintained jointly by the United States and Canada. Prior to 1927, records were obtained by Canada only.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	0.1e	100	0.0	Nil	Nil	Nil	Nil	Nil	-	-
2.....	-	-		54	0.0	"	"	"	"	"	-	-
3.....	-	-		28.9	0.0	"	"	"	"	"	-	-
4.....	-	-		17.4	0.0	"	"	"	"	"	-	-
5.....	-	-		12.0	0.0	"	"	"	"	"	-	-
6.....	-	-	0.1	7.2	0.0	"	"	"	"	"	-	-
7.....	-	-	0.1	4.2	0.0	"	"	"	"	"	-	-
8.....	-	-	0.1	2.2	0.0	"	"	"	"	"	-	-
9.....	-	-	0.1	1.6	0.0	"	"	"	"	"	-	-
10.....	-	-	0.1e	1.1	0.0	"	"	"	"	"	-	-
11.....	-	-	0.1e	1.0	0.0	"	"	"	"	"	-	-
12.....	-	-	0.0	1.0	0.0	"	"	"	"	"	-	-
13.....	-	-	0.0	0.6	0.0	"	"	"	"	"	-	-
14.....	-	-	0.0	0.3	Nil	"	"	"	"	"	-	-
15.....	-	-	0.0	0.2	"	"	"	"	"	"	-	-
16.....	-	-	0.0	0.1	"	"	"	"	"	"	-	-
17.....	-	-	0.0	0.1	"	"	"	"	"	"	-	-
18.....	-	-	0.0	0.0	"	"	"	"	"	"	-	-
19.....	-	-	0.0x	0.0	"	"	"	"	"	"	-	-
20.....	-	-	0.0	0.0	"	"	"	"	"	"	-	-
21.....	-	-	0.0	0.0	"	"	"	"	"	"	-	-
22.....	-	-	0.0	0.0	"	"	"	"	"	"	-	-
23.....	-	-	0.0	0.0	"	"	"	"	"	"	-	-
24.....	-	-	0.0	0.0	"	"	"	"	"	"	-	-
25.....	-	-	0.5	0.0	"	"	"	"	"	"	-	-
26.....	-	-	3.5	0.0	"	"	"	"	"	"	-	-
27.....	-	-	6.3	0.0	"	"	"	"	"	"	-	-
28.....	-	-	28.8	0.0	"	"	"	"	"	"	-	-
29.....	-	-	130	0.0	"	"	"	"	"	"	-	-
30.....	-	-	293	0.0	"	"	"	"	"	"	-	-
31.....	-	-	306	-	"	-	"	"	-	"	-	-
Mean	-	-	24.8	7.73	0.00	Nil	Nil	Nil	Nil	Nil	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	1,530	460	0.0	Nil	Nil	Nil	Nil	Nil	-	-

The Period.....Discharge: Daily - Maximum 31 March, 306

(245 days)

- Minimum at various times, Nil

Instantaneous Maximum 5 a.m., 31 March, 515

Mean 4.09

Runoff: Acre-feet 1,990

e - Estimated.

x - Staff gauge reading.

(International Gauging Station)

Location: Lat. 48° 59' 30", long. 106° 55' 40", in SW. 1/4 sec. 1, tp. 37 N., rge. 36 E., Montana, about one-half mile south of International Boundary, near Theony, and about eight miles above confluence with Rock Creek. **Drainage Area:** 160 square miles. **Gauge:** Wire-weight. **Measurement of Discharge:** From cableway or by wading. **Period of Record:** Mainly March to October, 1924 to date. **Extremes Recorded:** Daily - Maximum, 14 April 1952, 3,960 cfs, Minimum, Nil at various times; **Instantaneous Maximum** - 1 a.m., 15 April 1952, 7,080 cfs (from slope-area determination). **Revisions:** 1950, W.R.P. 117. Data to 1950 inclusive were reviewed in co-operation with the United States Geological Survey and revised data are available upon application to the District Engineer at Calgary, for address see page 8. **Remarks:** Records good. This is one of a number of stations which are maintained jointly by the United States and Canada. Prior to 1927, records were collected by Canada only. Discharge is affected by minor diversions for irrigation purposes upstream. From 1914 to 1923, records were obtained at McCoy's Ranch in SW. 1/4 sec. 6, tp. 1, rge. 27, W. 3rd Mer., in Canada above the east branch of this stream. Previously published summaries included records from the latter station in error.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	Nil	378	0.1	Nil	Nil	Nil	Nil	Nil	-	-
2.....	-	-	"	166	0.1e	"	"	"	"	"	-	-
3.....	-	-	"	71	0.1	"	"	"	"	"	-	-
4.....	-	-	"	56	0.1e	"	"	"	"	"	-	-
5.....	-	-	"	48.0	0.1	"	"	"	"	"	-	-
6.....	-	-	"	28.9	0.1	"	"	"	"	"	-	-
7.....	-	-	"	18.0	0.1e	"	"	"	"	"	-	-
8.....	-	-	"	16.5	0.0e	"	"	"	"	"	-	-
9.....	-	-	"	9.5	0.0e	"	"	"	"	"	-	-
10.....	-	-	"	3.5	0.0	"	"	"	"	"	-	-
11.....	-	-	"	2.2e	0.0	"	"	"	"	"	-	-
12.....	-	-	"	0.9	0.0	"	"	"	"	"	-	-
13.....	-	-	"	0.6	0.0	"	"	"	"	"	-	-
14.....	-	-	"	0.5	Nil	"	"	"	"	"	-	-
15.....	-	-	"	0.3	"	"	"	"	"	"	-	-
16.....	-	-	"	0.2	"	"	"	"	"	"	-	-
17.....	-	-	"	0.2e	"	"	"	"	"	"	-	-
18.....	-	-	"	0.2	"	"	"	"	"	"	-	-
19.....	-	-	"	0.2e	"	"	"	"	"	"	-	-
20.....	-	-	"	0.1	"	"	"	"	"	"	-	-
21.....	-	-	"	0.2	"	"	"	"	"	"	-	-
22.....	-	-	"	0.2	"	"	"	"	"	"	-	-
23.....	-	-	"	0.1	"	"	"	"	"	"	-	-
24.....	-	-	"	0.1	"	"	"	"	"	"	-	-
25.....	-	-	"	0.1e	"	"	"	"	"	"	-	-
26.....	-	-	1e	0.1	"	"	"	"	"	"	-	-
27.....	-	-	4.2	0.1	"	"	"	"	"	"	-	-
28.....	-	-	13.5	0.1e	"	"	"	"	"	"	-	-
29.....	-	-	210	0.1	"	"	"	"	"	"	-	-
30.....	-	-	520	0.1e	"	"	"	"	"	"	-	-
31.....	-	-	746	-	"	-	"	"	-	"	-	-
Mean	-	-	48.2	26.7	0.02	Nil	Nil	Nil	Nil	Nil	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	2,960	1,590	1.4	Nil	Nil	Nil	Nil	Nil	-	-

The Period.....Discharge: Daily - Maximum 31 March, 746
 (245 days) - Minimum at various times, Nil
 Instantaneous Maximum 10 a.m., 31 March, 1,070
 Mean 9.38
 Runoff: Acre-feet 4,550

e - Estimated.

Gauge heights 28 March to 6 April, from graph of observed readings.

POPLAR RIVER TRIBUTARY BASIN

MIDDLE BRANCH OF POPLAR RIVER AT INTERNATIONAL BOUNDARY - STATION No. 11AE_{0.5}

(International Gauging Station)

Location: Lat. 48° 59' 30", long. 105° 41' 40", in SE. 1/4 sec. 6, tp. 37 N., rge. 46 E., Montana, about three-quarters of a mile south of International Boundary, thirteen miles west of East Poplar Customs Post and twenty-seven miles southwest of Big Beaver, Saskatchewan. Drainage Area: 381 square miles. Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: Mainly March to October, 1931 to date. Extremes Recorded: Daily - Maximum, 6 April 1954, 5,000 cfs, Minimum, Nil at various times; Instantaneous Maximum - about 8 p.m., 6 April 1954, 12,700 cfs (slope-area determination). Revisions: Data to 1950 inclusive were reviewed in co-operation with the United States Geological Survey and revised data are available upon application to the District Engineer at Calgary, for address see page 8. Remarks: Records good during open-water period and fair during ice period. This station is maintained by the United States under agreement with Canada.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	1b	868	8.6	4.8	0.3	0.1	0.1	0.2	-	-
2.....	-	-	0.6	416	8.6	6.5	0.3	0.1	0.1	0.2	-	-
3.....	-	-	0.4x	208	8.6	6.2	0.3	0.1	0.1	0.2	-	-
4.....	-	-		136	18.4	6.0	0.3	0.1	0.1	0.2	-	-
5.....	-	-		106	16.8	5.2	0.3	0.1	0.1	0.2	-	-
6.....	-	-		71	12.8	4.0	0.2	0.1	0.1	0.2	-	-
7.....	-	-		45.5	11.0	2.9	0.2	0.1	0.1	0.2	-	-
8.....	-	-		33.2	9.9	2.2	0.2	0.1	0.0	0.2	-	-
9.....	-	-		28.2	8.9	1.7	0.3	0.1	0.0	0.2	-	-
10.....	-	-		26.9	8.6	1.5	0.3	0.1	0.0	0.2	-	-
11.....	-	-		24.4	8.6	1.4	0.2	0.1	0.0	0.2	-	-
12.....	-	-		21.6	7.6	1.2	0.2	0.1	0.1	0.2	-	-
13.....	-	-		18.8	6.8	1.1	0.2	0.1	0.1	0.2	-	-
14.....	-	-		16.8	6.2	0.9	0.3	0.1	0.1	0.2	-	-
15.....	-	-	0.2	14.8	5.5	0.9	0.4	0.1	0.1	0.2	-	-
16.....	-	-		14.0	5.2	0.8	0.3	0.1	0.1	0.2	-	-
17.....	-	-		12.5	4.6	0.7	0.4	0.1	0.1	0.2	-	-
18.....	-	-		12.5	4.4	0.7	0.4	0.1	0.1	0.2	-	-
19.....	-	-		12.1	4.4	0.9	0.4	0.1	0.1	0.2	-	-
20.....	-	-		11.7	4.2	0.8	0.3	0.1	0.1	0.2	-	-
21.....	-	-		11.7	3.8	0.7	0.2	0.1	0.1	0.2	-	-
22.....	-	-		11.7	3.2	1.2	0.2	0.1	0.1	0.2	-	-
23.....	-	-		11.7	3.2	1.2	0.2	0.1	0.1	0.2	-	-
24.....	-	-		11.7	3.2	1.1	0.2	0.1	0.1	0.2	-	-
25.....	-	-		11.4	3.4	0.8	0.2	0.1	0.1	0.2	-	-
26.....	-	-	5	10.2	3.2	0.7	0.2	0.0	0.1	0.3	-	-
27.....	-	-	10	10.2	3.4	0.4	0.2	0.0	0.1	0.6	-	-
28.....	-	-	50	9.2	3.4	0.3	0.2	0.1	0.1	0.7	-	-
29.....	-	-	200b	8.9	3.6	0.3	0.2	0.1	0.1	0.8	-	-
30.....	-	-	875	8.6	3.6	0.3	0.2	0.2	0.2	0.9	-	-
31.....	-	-	1,300	-	3.6	-	0.2	0.2	-	1.0e	-	-
Mean	-	-	78.9	73.4	6.69	1.91	0.26	0.10	0.09	0.30	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	4,850	4,370	411	114	16	6.1	5.4	1.8	-	-

The Period..... Discharge: Daily - Maximum, 31 March, 1,300
 (245 days) - Minimum at various times, 0.0
 Instantaneous Maximum 9:30 p.m., 30 March, 1,590
 Mean 20.2
 Runoff: Acre-feet 9,790

b - Ice conditions 1 to 29 March.

e - Estimated.

x - Staff gauge reading.

(International Gauging Station)

Location: Lat. 49° 00' 00", long. 105° 24' 30", in SW. 1/4 sec. 3, tp. 1, rge. 26, W. 2nd Mer., Saskatchewan, near Canadian East Poplar Customs Post and about twenty-seven miles southwest of Big Beaver. Drainage Area: 256 square miles. Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: Mainly March to October, 1931 to date. Extremes Recorded: Daily - Maximum, 22 March 1939, 2,400 cfs, Minimum, Nil at various times; Instantaneous Maximum - 1 p.m., 22 March 1939, 2,760 cfs. Revisions: Data to 1950 inclusive were reviewed in co-operation with the United States Geological Survey and revised data are available upon application to the District Engineer at Calgary, for address see page 8. Remarks: Records fair. This station is maintained by the United States under agreement with Canada.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	20b	290b	6.5	4.9	4.1	3.3	4.6	3.6	-	-
2.....	-	-	12	136	7.1	6.7	3.6	2.9	4.3	3.8	-	-
3.....	-	-	9	78	6.5	5.5	3.8	2.7	4.4	3.9	-	-
4.....	-	-	6	49.2	6.9	5.7	3.8	2.9	3.9	3.8	-	-
5.....	-	-	4	31.5	6.7	5.3	3.6	2.7	3.9	4.1	-	-
6.....	-	-	3	22.0	6.7	4.9	3.5	2.6	4.3	3.9	-	-
7.....	-	-		16.9	6.7	5.3	3.5	2.5	4.1	4.3	-	-
8.....	-	-		14.5	6.5	4.7	3.8	2.5	4.3	4.4	-	-
9.....	-	-		14.9	6.5	4.9	4.1	2.5	4.3	4.7	-	-
10.....	-	-		16.0	6.5	4.7	4.6	2.2	4.1	3.9	-	-
11.....	-	-		15.3	5.9	4.4	4.1	2.3	4.3	4.4	-	-
12.....	-	-		14.5	6.1	4.4	3.9	2.3	4.4	4.6	-	-
13.....	-	-		13.0	6.3	4.3	4.3	2.6	4.9	4.6	-	-
14.....	-	-		11.7	5.5	4.4	4.9	2.6	4.1	4.7	-	-
15.....	-	-		11.1	5.3	4.9	5.3	2.0	3.2	4.6	-	-
16.....	-	-	2	10.2	5.5	4.9	5.7	2.0	3.2	4.9	-	-
17.....	-	-		9.1	5.7	5.1	6.5	1.9	3.8	4.7	-	-
18.....	-	-		9.9	4.9	4.6	5.5	1.5	3.9	4.7	-	-
19.....	-	-		8.6	4.9	5.1	4.9	1.5	4.3	4.7	-	-
20.....	-	-		8.3	4.9	4.4	4.7	1.9	3.9	3.3	-	-
21.....	-	-		7.4	5.1	4.4	5.1	1.9	3.2	2.8	-	-
22.....	-	-		7.4	4.4	4.4	4.7	1.9	3.5	3.5	-	-
23.....	-	-		7.4	4.9	4.4	4.4	2.1	3.5	3.9	-	-
24.....	-	-		7.1	4.7	4.3	3.9	1.9	3.5	4.3	-	-
25.....	-	-	5	6.9	4.6	3.6	3.3	2.6	3.5	4.4	-	-
26.....	-	-	80	7.1	4.9	3.6	3.5	2.8	3.2	4.6	-	-
27.....	-	-	220	7.6	5.1	5.3	3.8	3.2	3.3	4.7	-	-
28.....	-	-	550	6.7	4.7	7.9	3.2	3.8	3.6	4.7	-	-
29.....	-	-	630	8.1	4.6	4.7	2.9	3.8	3.8	4.7	-	-
30.....	-	-	510	7.4	4.7	4.3	3.1	4.7	3.6	4.7	-	-
31.....	-	-	530	-	4.7	-	3.2	4.7	-	4.7e	-	-
Mean	-	-	84.4	28.5	5.61	4.87	4.17	2.61	3.90	4.28	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	5,190	1,690	345	290	256	160	232	263	-	-

The Period..... Discharge: Daily - Maximum 29 March, 630
 (245 days) - Minimum 18 and 19 August, 1.5

Mean 17.3

Runoff: Acre-feet 8,430

b - Ice conditions 1 March to 1 April.

e - Estimated.

MINOR DRAINAGE BASINS
(Included in area but not tributary to above Drainage Basins)

BIGSTICK LAKE BASIN

MAPLE CREEK ABOVE JUNCTION RESERVOIR - STATION No. 5HA₈

Location: Lat. 49° 54', long. 109° 30', in NW. 1/4 sec. 9, tp. 11, rge. 26, W. 3rd Mer., Saskatchewan, about one mile west of Maple Creek and two miles above head of Junction Reservoir. Drainage Area: 78 square miles. Gauge: Wire-weight. Measurement of Discharge: From bridge or by wading. Period of Record: Mainly March to October, 1909 to 1915 and 1944 to date; miscellaneous measurements in 1908. Records for period 1908 to 1915 obtained about one mile downstream from present station and published under title "Maple Creek near Maple Creek" until 1909 and "Maple Creek at Maple Creek" from 1910 to 1915. Extremes Recorded: Daily - Maximum, 10 April 1955, 1,320 cfs, Minimum, Nil at various times; Instantaneous Maximum - about 7 a.m., 10 April 1955, 1,730 cfs. Remarks: Records good during open-water period and fair during ice period. The discharge has been affected by diversion for irrigation purposes since 1944. Refer also to published record for "Maple Creek near Maple Creek" obtained from 1910 to 1919 about three miles downstream.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	Nil b	5	0.6	0.3	0.0	Nil	Nil	Nil	-	-
2.....	-	-	"	4	0.7	0.3	0.0	"	"	"	-	-
3.....	-	-	"	0	0.6	0.2	0.0	"	"	"	-	-
4.....	-	-	"	0	0.5	0.1	0.0	"	"	"	-	-
5.....	-	-	"	0	0.4	0.1	0.0	"	"	"	-	-
6.....	-	-	"	2	0.4	0.0	0.1	"	"	"	-	-
7.....	-	-	"	1	0.3	0.0	1.1	"	"	"	-	-
8.....	-	-	"	5	0.4	0.0e	0.8	"	"	"	-	-
9.....	-	-	"	6	0.3	0.0e	0.5	"	"	"	-	-
10.....	-	-	"	3	0.4	0.0e	0.4	"	"	"	-	-
11.....	-	-	"	3	0.4	0.0e	0.3	"	"	"	-	-
12.....	-	-	"	3b	0.4	0.1e	0.3	"	"	"	-	-
13.....	-	-	"	3.0	0.5	0.1e	0.3e	"	"	"	-	-
14.....	-	-	"	2.3	1.2	0.1e	0.2e	"	"	"	-	-
15.....	-	-	"	3.7	1.0	0.1	0.2e	"	"	"	-	-
16.....	-	-	"	2.6	0.8	0.1e	0.2e	"	"	"	-	-
17.....	-	-	"	2.2e	0.7	0.1	0.1e	"	"	"	-	-
18.....	-	-	"	1.7	0.6	0.1	0.1e	"	"	"	-	-
19.....	-	-	"	1.6	0.6	0.1	0.0e	"	"	"	-	-
20.....	-	-	"	1.2	0.5	0.1	0.0e	"	"	"	-	-
21.....	-	-	"	0.9	0.4	0.0	0.0	"	"	"	-	-
22.....	-	-	"	0.8	0.2	0.0	0.0	Nil	"	"	-	-
23.....	-	-	"	0.9	0.2	0.1	0.0	14.8	"	"	-	-
24.....	-	-	"	0.5	0.2	0.1	0.0	8.0	"	"	-	-
25.....	-	-	"	0.5	0.1	0.1	0.0	0.6	"	"	-	-
26.....	-	-	"	0.5	0.1	0.0	0.0	0.2	"	"	-	-
27.....	-	-	Nil	0.5	0.1	0.0	0.0	0.1	"	"	-	-
28.....	-	-	0	0.5	0.1	0.0	0.0	0.1	"	"	-	-
29.....	-	-	0	0.5	0.1	0.0	0.0	0.1	"	"	-	-
30.....	-	-	0	0.5	0.1	0.0	0.0	0.1	Nil	"	-	-
31.....	-	-	0	-	0.1	-	Nil	0.0	-	"	-	-
Mean	-	-	0.00	1.88	0.42	0.07	0.15	0.77	Nil	Nil	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	0.0	112	26	4.4	9.1	48	Nil	Nil	-	-

The Period.....Discharge: Daily - Maximum 23 August, 14.8
(245 days) - Minimum at various times, Nil

Mean 0.41

Runoff: Acre-feet 200

b - Ice conditions 1 March to 12 April. e - Estimated.
Gauge heights from graph of observed readings 8 to 11 April.

Location: Lat. 49° 49', long. 109° 31', in SE. 1/4 sec. 18, tp. 10, rge. 26, W. 3rd Mer., Saskatchewan, six miles south and one mile west of Maple Creek on Highway No. 21. Gauge: Staff. Period of Record: April 1957 to date. Extremes Recorded: Maximum, 6 May 1957 and 27 April 1958, 2,800.17 feet, Minimum, 12 February 1958, 2,793.92 feet. Remarks: Elevations are referred to P.F.R.A. bench mark No. 2009, brass cap in concrete near east end of main dam, elevation 2,826.95 feet. Reservoir is located in a saddle between Maple Creek and Gap Creek. Water is diverted into reservoir from Maple Creek and may be released to either creek.

Elevations in Feet and Contents in Acre-feet for Calendar Year 1958

Month	Elevation at End of Month	Contents at End of Month	Change in Contents During Month
January.....	2,793.97	520	- 12
February.....	2,793.99	522	+ 2
March.....	2,796.00	783	+261
April.....	2,800.16	1,520	+737
May.....	2,799.63	1,410	-110
June.....	2,798.66	1,230	-180
July.....	2,797.93	1,100	-130
August.....	2,797.02	944	-156
September.....	2,796.68	889	- 55
October.....	2,796.47	857	- 32
November.....	2,795.60	728	-129
December.....	2,795.82	758	+ 30
The Year.....	-	-	+226

Location: Lat. 49° 46', long. 109° 38', in NW. 1/4 sec. 29, tp. 9, rge. 27, W. 3rd Mer., Saskatchewan, about fourteen miles southwest of Maple Creek. Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: Mainly March to October, 1944 to date. Prior to 1956, records were obtained from a manual gauge in NE. 1/4 sec. 19. Extremes Recorded: Daily - Maximum, 9 April 1955, 1,600 cfs (estimated), Minimum, Nil at various times; Instantaneous Maximum - 9 April 1955, 1,870 cfs (by slope-area determination). Remarks: Records good during open-water period and fair during ice period. Discharge affected by diversion to Downie Lake above this station.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	1b	2	0.6	0.1	Nil	Nil	Nil	Nil	-	-
2.....	-	-	1	3	0.4	0.2	"	"	"	"	-	-
3.....	-	-	1	1	0.3	0.2	"	"	"	"	-	-
4.....	-	-	1	2b	0.2	0.6	"	"	"	"	-	-
5.....	-	-	1	1.4	0.5	0.5	"	"	"	"	-	-
6.....	-	-	1	1.4	2.8	0.2	"	"	"	"	-	-
7.....	-	-	1	1.1	1.5	0.1	"	"	"	"	-	-
8.....	-	-	1	1.1	2.2	0.1	"	"	"	"	-	-
9.....	-	-	1	1.1	1.7	0.0	"	"	"	"	-	-
10.....	-	-	1	1.2	1.7	0.0	"	"	"	"	-	-
11.....	-	-	1	1.1	1.4	0.0	"	"	"	"	-	-
12.....	-	-	1x	1.1	1.5	0.0	"	"	"	"	-	-
13.....	-	-	1x	0.8	2.0	0.0	"	"	"	"	-	-
14.....	-	-	1	0.9	3.5	0.0	"	"	"	"	-	-
15.....	-	-	1	0.8	3.0	0.1	"	"	"	"	-	-
16.....	-	-	1	0.9	2.4	0.1	"	"	"	"	-	-
17.....	-	-	1	0.8	1.9	0.1	"	"	"	"	-	-
18.....	-	-	1	0.8	1.5	0.0	"	"	"	"	-	-
19.....	-	-	1	0.6	1.2	0.0	"	"	"	"	-	-
20.....	-	-	1	0.8	0.9	0.0	"	"	"	"	-	-
21.....	-	-	1	0.8	0.8	0.0	"	"	"	"	-	-
22.....	-	-	1	0.9	0.6	0.0	"	"	"	"	-	-
23.....	-	-	1	0.7	0.5	0.0	"	"	"	"	-	-
24.....	-	-	1	0.7	0.5	0.0	"	"	"	"	-	-
25.....	-	-	1	0.7	0.4	0.0	"	"	"	"	-	-
26.....	-	-	1	0.6	0.2	0.0	"	"	"	"	-	-
27.....	-	-	1	0.7	0.2	0.0	"	"	"	"	-	-
28.....	-	-	1	0.6	0.1	0.0	"	"	"	"	-	-
29.....	-	-	2	0.5	0.0	0.0	"	"	"	"	-	-
30.....	-	-	3	0.4	0.0	Nil	"	"	"	"	-	-
31.....	-	-	1	-	0.0	-	"	"	-	"	-	-
Mean	-	-	1.10	1.02	1.11	0.08	Nil	Nil	Nil	Nil	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	67	60	68	4.6	Nil	Nil	Nil	Nil	-	-

The Period..... Discharge: Daily - Maximum 14 May, 3.5
 (245 days) - Minimum at various times, Nil
 Instantaneous Maximum 3 a.m., 4 April, 12
 Mean 0.41
 Runoff: Acre-feet 200

b - Ice conditions 1 March to 4 April.

x - Staff gauge readings.

Location: Lat. 49° 54', long. 109° 35', in NE. 1/4 sec. 11, tp. 11, rge. 27, W. 3rd Mer., Saskatchewan, four miles west of Maple Creek and about three miles above head of Junction Reservoir. Gauge: Wire-weight. Measurement of Discharge: From bridge or by wading. Period of Record: March to October, 1944 to date. Extremes Recorded: Daily - Maximum, 10 April 1955, 2,610 cfs, Minimum, Nil at various times; Instantaneous Maximum - about 10 a.m., 10 April 1955, 3,170 cfs. Revisions: June 1949 mean discharge has been corrected to 0.8 cfs. Remarks: Records fair. Discharge is affected by upstream regulation for irrigation purposes.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	1b	72	2.0	1.1	0.0	0.2	0.8	0.3	-	-
2.....	-	-	1	62	2.6	1.2	0.0	0.2	0.7	0.4	-	-
3.....	-	-	1	24.9	2.7	1.2	0.1	0.1	0.6	0.4	-	-
4.....	-	-	1	20.1	2.1	0.9	0.1	0.1	0.4	0.4	-	-
5.....	-	-	1	25.3	1.6	0.7	0.0	0.1	0.4	0.3	-	-
6.....	-	-	1	11.6	1.6	0.7	0.0	0.1	0.5	0.2	-	-
7.....	-	-	1	8.0	1.7	0.7	0.0	0.1	0.2	0.2	-	-
8.....	-	-	1	7.6	1.5	0.6	0.0	0.2	0.3	0.2	-	-
9.....	-	-	1	7.8	5.2	0.7	0.0	0.2	0.2	0.2	-	-
10.....	-	-	1	6.5	2.7	0.7	0.0	0.2	0.2	0.3	-	-
11.....	-	-	1	6.0	2.6	0.5	0.0	0.2	0.2	0.4	-	-
12.....	-	-	1	5.7	2.3	0.5	0.0	0.2	0.0	0.3	-	-
13.....	-	-	1	5.5	2.7	0.5	0.1	0.2	0.0	0.3	-	-
14.....	-	-	1	3.5	0.0	0.4	0.4	0.1	0.0	0.3	-	-
15.....	-	-	1	2.2	0.1	0.4	1.2	1.2	0.1	0.2	-	-
16.....	-	-	1	1.8	0.1	0.4	0.2	3.1	0.2	0.1	-	-
17.....	-	-	1	1.2	0.1	0.4	0.2	3.0	0.2	0.0	-	-
18.....	-	-	1	8.5	0.1	0.4	0.1	2.5	0.2	0.1	-	-
19.....	-	-	1	2.0	0.1	0.6	0.1	0.7	0.2	0.1	-	-
20.....	-	-	1	1.2	0.2e	0.5	0.0	0.7	0.2	0.1	-	-
21.....	-	-	1	0.9	0.3e	0.3	0.0	0.4	0.2	0.1	-	-
22.....	-	-	1	0.9	0.4e	0.3	0.0	0.5	0.2	0.1	-	-
23.....	-	-	1	0.7	0.4e	0.3	0.3	0.7	0.2	0.1	-	-
24.....	-	-	1	2.2	0.5e	0.2	0.3	0.2	0.3	0.1	-	-
25.....	-	-	2	2.2	0.6e	0.2	0.3	0.1	0.3	0.0	-	-
26.....	-	-	2	2.5	0.7	0.2	0.3	0.2	0.3	0.1	-	-
27.....	-	-	2	2.3	0.7	0.2	0.3	0.3	0.3	0.1	-	-
28.....	-	-	3	2.5	0.7	0.0	0.3	0.5	0.4	0.1	-	-
29.....	-	-	77	2.3	0.7	0.0	0.4	1.0	0.4	0.2	-	-
30.....	-	-	81	2.1	0.7	0.0	0.4	1.1	0.3	0.3	-	-
31.....	-	-	84b	-	0.7	-	0.3	1.0	-	0.4	-	-
Mean	-	-	8.87	10.1	1.24	0.49	0.17	0.63	0.28	0.21	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	545	599	76	29	11	38	17	13	-	-

The Period..... Discharge: Daily - Maximum 31 March, 84
 (245 days) - Minimum at various times, 0.0
 Mean 2.73
 Runoff: Acre-feet 1,330

b - Ice conditions 1 to 31 March.

e - Estimated.

DOWNIE CREEK BELOW DOWNIE LAKE - STATION No. 5HA₇₃

Location: Lat. 49° 47', long. 109° 39', in SW. 1/4 sec. 31, tp. 9, rge. 27, W. 3rd Mer., Saskatchewan, about one mile downstream from confluence with Downie Lake Outflow Canal and one mile above confluence with Gap Creek. Gauge: Wire-weight. Measurement of Discharge: From cableway or by wading. Period of Record: Mainly March to October, 1955 to date. Extremes Recorded: Daily - Maximum (Regulated), 13 July 1955, 188 cfs, Minimum, Nil at various times, Remarks: Records fair. Discharge affected by release of stored water from Downie Lake Reservoir for irrigation purposes downstream.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Average Discharge in Cubic Feet per Second for Calendar Year 1956													
Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
1.....	-	-	b	3	0.6	31.4	0.4	22.4	0.0e	0.1e	-	-	
2.....	-	-		1	0.8	13.7	0.3	19.8	0.0e		-	-	
3.....	-	-		1	0.8	8.2	0.3	19.8	0.0		-	-	
4.....	-	-		0	0.8	2.7	0.3	25.2	18.6		-	-	
5.....	-	-		0	0.8	0.7	0.3				-	-	
6.....	-	-	1	1	1.0	0.6	0.3	15.4	0.0e	0.1	-	-	
7.....	-	-		1	1.2	0.5	0.3	15.4		0.1e	-	-	
8.....	-	-		1	1.3	0.4	4.5	12.1		0.1e	-	-	
9.....	-	-		1	1.3	0.4	23.1	3.9		0.1e	-	-	
10.....	-	-		1	1.9	0.4	43.7	0.6		0.1	-	-	
11.....	-	-		1	2.7	0.4	51	0.4		0.1	-	-	
12.....	-	-		1	13.1	0.4	51	0.3		0.1	-	-	
13.....	-	-		1	42.8	0.4	59	0.3		0.1	-	-	
14.....	-	-		1	42.8	0.4	51	0.2		0.1	-	-	
15.....	-	-		1	42.8	0.4	51	0.2		0.1	-	-	
16.....	-	-	1b	1	45.5	0.4	50	0.2	0.0e	0.1	-	-	
17.....	-	-		1	44.6	0.5	52	0.2		0.1	-	-	
18.....	-	-		1b	49.2	0.5	53	0.1		0.1	-	-	
19.....	-	-		0.7	52	0.5	53	0.1		0.1	-	-	
20.....	-	-		0.7	52	0.4	55	0.1		0.1	-	-	
21.....	-	-		0.7	52	0.4	53	0.0e		0.1e	0.1	-	-
22.....	-	-		0.7	57	0.4	53				0.1	-	-
23.....	-	-		0.6	61	0.4	52				0.1	-	-
24.....	-	-		0.6	53	0.4	56				0.1	-	-
25.....	-	-		0.8	49.2	0.4	53				0.1	-	-
26.....	-	-	1	0.8	53	0.4	51	0.0e	0.1e	0.1	-	-	
27.....	-	-		1	0.8	55	0.3			41.9	0.1	-	-
28.....	-	-		7	0.8	57	0.3			41.9	0.1	-	-
29.....	-	-		28	0.6	57	0.4			41.0	0.1	-	-
30.....	-	-		17	0.6	46.4	0.4			33.0	0.1	-	-
31.....	-	-		5	-	45.5	-			25.2	-	0.1	-
Mean	-	-	2.71	0.88	31.7	2.24	35.5	5.01	0.04e	0.10	-	-	
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-	
Acre-feet	-	-	167	52	1,950	133	2,180	308	2.2	6.1	-	-	

The Period.....Discharge: Daily - Maximum 23 May, 61
 (245 days) - Minimum at various times, 0.0
 Mean 9.88
 Runoff: Acre-feet 4,800

b - Ice conditions 1 March to 18 April.

e - Estimated.

Source: Gap Creek. Location: Lat. 49° 45', long. 109° 39', on northern boundary of sec. 19, tp. 9, rge. 27, W. 3rd Mer., Saskatchewan, about one thousand feet below diversion weir on Gap Creek, five miles above Downie Lake reservoir and about thirteen miles southwest of Maple Creek. Gauge: Staff. Measurement of Discharge: From bridge or by wading. Period of Record: March to October, 1944 to date. Extremes Recorded: Daily - Maximum, 1 April 1958, 225 cfs. Remarks: Records fair.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	b	225b	5.8	Nil	Nil	Nil	Nil	Nil	-	-
2.....	-	-		190	6.4	"	"	"	"	"	-	-
3.....	-	-		160	5.0	"	"	"	"	"	-	-
4.....	-	-	1	186	4.7	"	"	"	"	"	-	-
5.....	-	-		131	2.3	"	"	"	"	"	-	-
6.....	-	-		53	0.1	"	"	"	"	"	-	-
7.....	-	-		49.1	0.5	"	"	"	"	"	-	-
8.....	-	-		44.0	0.0	"	"	"	"	"	-	-
9.....	-	-		37.6	Nil	"	"	"	"	"	-	-
10.....	-	-		39.5	"	"	"	"	"	"	-	-
11.....	-	-		33.0	"	"	"	"	"	"	-	-
12.....	-	-		22.5	"	"	"	"	"	"	-	-
13.....	-	-		25.8	"	"	"	"	"	"	-	-
14.....	-	-		37.6	0.1	"	"	"	"	"	-	-
15.....	-	-		21.9	Nil	"	"	"	"	"	-	-
16.....	-	-	Nil	21.6	"	"	"	"	"	"	-	-
17.....	-	-		17.5	"	"	"	"	"	"	-	-
18.....	-	-		11.4	"	"	"	"	"	"	-	-
19.....	-	-		9.3	"	"	"	"	"	"	-	-
20.....	-	-		7.4	"	"	"	"	"	"	-	-
21.....	-	-		8.1	"	"	"	"	"	"	-	-
22.....	-	-		8.3	"	"	"	"	"	"	-	-
23.....	-	-		6.8	"	"	"	"	"	"	-	-
24.....	-	-		5.7	"	"	"	"	"	"	-	-
25.....	-	-		4.8	"	"	"	"	"	"	-	-
26.....	-	-		4.5	"	"	"	"	"	"	-	-
27.....	-	-	10	4.6	"	"	"	"	"	"	-	-
28.....	-	-	15	4.5	"	"	"	"	"	"	-	-
29.....	-	-	16	4.3	"	"	"	"	"	"	-	-
30.....	-	-	133	4.5	"	"	"	"	"	"	-	-
31.....	-	-	183	-	"	-	"	"	-	"	-	-
Mean	-	-	11.7	46.0	0.84	Nil	Nil	Nil	Nil	Nil	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	720	2,736	51	Nil	Nil	Nil	Nil	Nil	-	-

The Period.....Discharge: Daily - Maximum 1 April, 225
(245 days) Runoff: Acre-feet 3,510

b - Ice conditions 1 March to 1 April.

Gauge heights from graph of observed readings from 27 March to 15 April.

Daily Elevations in Feet for Calendar Years 1950 and 1951

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1950												
1.....	-	-	-	76.99	83.58	83.61	79.56	76.46	76.23	75.69	-	-
2.....	-	-	-	77.32	83.62	83.53	79.54	76.41	76.20	-	-	-
3.....	-	-	-	77.37	83.64	83.52	79.49	76.58	75.26	75.59	-	-
4.....	-	-	-	77.42	83.67	83.50	79.44	76.50	75.25	75.69	-	-
5.....	-	-	-	77.02	83.67	83.45	79.39	76.41	76.10	75.69	-	-
6.....	-	-	-	77.22	83.68	83.46	77.23	76.48	76.08	75.70	-	-
7.....	-	-	-	76.79	83.73	83.42	77.03	-	76.02	75.70	-	-
8.....	-	-	-	76.42	83.75	83.45	76.93	76.41	-	75.42	-	-
9.....	-	-	75.28	76.80	83.79	83.40	76.78	76.38	76.02	75.43	-	-
10.....	-	-	74.92	76.82	83.81	83.37	76.76	76.43	76.02	75.76	-	-
11.....	-	-	74.53	76.99	83.84	80.81	76.74	76.54	75.99	75.63	-	-
12.....	-	-	74.39	76.71	83.89	80.64	76.69	76.50	75.98	75.63	-	-
13.....	-	-	74.38	78.07	83.97	80.52	76.64	76.52	75.96	75.60	-	-
14.....	-	-	74.22	79.58	83.96	78.92	76.54	76.56	75.96	73.27	-	-
15.....	-	-	74.12	80.04	83.99	78.72	76.34	76.59	75.93	72.49	-	-
16.....	-	-	73.93	80.78	83.98	78.49	76.19	76.59	75.90	-	-	-
17.....	-	-	73.76	81.17	83.99	78.42	76.04	76.51	75.88	-	-	-
18.....	-	-	73.61	82.08	83.99	78.22	75.94	76.56	75.87	73.86	-	-
19.....	-	-	73.58	82.24	83.97	78.12	76.03	76.49	75.85	72.88	-	-
20.....	-	-	73.57	82.30	83.89	77.97	76.06	76.42	-	73.09	-	-
21.....	-	-	73.87	82.62	83.88	77.87	75.71	76.43	75.78	-	-	-
22.....	-	-	75.33	82.92	83.86	77.63	75.64	76.40	75.75	-	-	-
23.....	-	-	75.29	83.17	83.87	77.43	76.01	76.35	75.73	75.52	-	-
24.....	-	-	74.67	83.18	83.84	77.28	76.09	76.37	75.61	-	-	-
25.....	-	-	74.44	83.30	83.80	79.74	76.07	76.39	75.23	-	-	-
26.....	-	-	75.68	83.39	83.77	79.70	76.01	76.35	75.61	73.09	-	-
27.....	-	-	75.36	83.43	83.73	79.66	75.98	76.31	-	-	-	-
28.....	-	-	75.00	83.50	83.75	79.64	75.95	-	75.78	-	-	-
29.....	-	-	76.65	83.54	83.68	79.61	75.93	76.26	75.72	-	-	-
30.....	-	-	76.75	83.57	83.64	79.58	75.93	76.27	75.72	-	-	-
31.....	-	-	76.53	-	83.61	-	77.00	76.28	-	-	-	-
1951												
1.....	-	-	73.04	-	91.89	91.87	91.72	85.07	87.72	88.48	-	-
2.....	-	-	73.00	79.72	93.00	91.87	90.70	85.07	87.72	88.28	-	-
3.....	-	-	73.00	80.09	93.00	91.87	90.70	84.97	87.82	88.28	-	-
4.....	-	-	73.00	80.66	93.00	90.70	90.70	84.57	88.28	88.28	-	-
5.....	-	-	73.00	82.36	93.00	90.70	90.70	86.46	88.28	88.28	-	-
6.....	-	-	73.00	83.77	93.00	90.70	90.70	85.37	88.36	88.28	-	-
7.....	-	-	73.00	84.76	93.00	90.70	90.70	85.07	88.28	88.28	-	-
8.....	-	-	72.99	-	93.00	90.70	90.70	84.87	88.28	88.28	-	-
9.....	-	-	72.99	86.86	93.00	90.70	90.70	87.22	88.28	88.28	-	-
10.....	-	-	72.99	87.30	93.00	90.70	90.70	87.02	88.28	88.28	-	-
11.....	-	-	72.99	88.12	93.00	90.70	90.70	82.81	88.48	88.28	-	-
12.....	-	-	72.99	88.12	93.00	90.70	90.70	-	88.48	88.28	-	-
13.....	-	-	72.99	89.39	93.00	90.70	-	86.76	88.58	88.28	-	-
14.....	-	-	73.06	89.39	93.00	90.70	90.70	86.76	88.58	88.28	-	-
15.....	-	-	73.08	89.39	93.00	90.70	90.70	86.66	88.58	88.28	-	-
16.....	-	-	-	89.39	93.00	90.70	90.70	86.66	88.48	88.28	-	-
17.....	-	-	-	89.39	91.87	90.70	90.70	86.66	88.48	88.28	-	-
18.....	-	-	72.99	89.39	91.87	90.70	90.70	86.66	88.48	88.28	-	-
19.....	-	-	72.99	89.39	91.87	90.70	90.70	86.66	88.48	88.28	-	-
20.....	-	-	73.00	90.70	91.87	90.70	90.70	86.66	88.58	88.28	-	-
21.....	-	-	73.00	90.70	91.87	90.70	90.70	86.56	88.58	88.28	-	-
22.....	-	-	73.00	90.70	91.87	90.70	90.70	86.56	88.48	88.28	-	-
23.....	-	-	-	90.71	91.87	90.70	89.38	86.56	88.48	88.28	-	-
24.....	-	-	73.12	90.70	91.87	90.70	89.38	86.66	88.48	88.28	-	-
25.....	-	-	73.18	90.70	92.49	90.70	89.38	86.66	88.48	88.28	-	-
26.....	-	-	73.43	90.70	92.87	91.87	91.33	86.66	88.48	88.28	-	-
27.....	-	-	74.21	90.70	92.87	91.87	85.37	86.66	88.48	88.28	-	-
28.....	-	-	74.73	91.89	92.87	91.87	89.18	86.66	88.48	88.28	-	-
29.....	-	-	75.98	91.89	92.87	90.70	85.27	86.76	88.48	88.28	-	-
30.....	-	-	79.28	91.89	92.87	-	85.07	87.02	88.48	88.28	-	-
31.....	-	-	79.58	-	-	-	85.46	87.62	-	88.68	-	-

Daily Elevations in Feet for Calendar Years 1952 and 1953

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1952												
1.....	-	-	91.76	93.98	93.58	93.18	91.76	-	88.22	87.42	-	-
2.....	-	-	91.76	94.09	93.58	-	91.76	89.58	-	-	-	-
3.....	-	-	91.76	94.08	-	93.18	91.76	-	-	-	-	-
4.....	-	-	91.76	93.78	93.58	-	91.76	89.58	88.02	87.32	-	-
5.....	-	-	91.76	93.78	93.58	93.08	-	-	88.02	-	-	-
6.....	-	-	91.76	94.18	93.68	93.08	-	-	-	-	-	-
7.....	-	-	91.76	94.66	93.58	93.08	-	-	-	87.32	-	-
8.....	-	-	91.76	95.36	-	-	-	-	-	-	-	-
9.....	-	-	91.76	94.28	-	93.08	-	88.92	87.92	87.32	-	-
10.....	-	-	-	-	93.58	92.98	-	88.92	-	-	-	-
11.....	-	-	91.76	93.48	93.58	92.98	-	-	-	87.22	-	-
12.....	-	-	91.76	93.48	-	92.98	-	88.22	87.92	-	-	-
13.....	-	-	91.76	-	93.58	92.90	-	88.22	-	-	-	-
14.....	-	-	-	93.68	-	92.90	-	88.12	-	87.22	-	-
15.....	-	-	91.76	-	93.58	92.90	-	88.22	-	-	-	-
16.....	-	-	-	93.68	-	92.80	-	88.22	87.92	-	-	-
17.....	-	-	91.76	93.78	93.48	92.50	-	-	87.92	-	-	-
18.....	-	-	91.76	93.78	-	92.40	-	-	-	87.22	-	-
19.....	-	-	-	-	93.48	-	-	88.22	-	-	-	-
20.....	-	-	-	93.78	93.38	-	-	-	87.92	-	-	-
21.....	-	-	91.76	93.78	93.28	-	89.78	-	-	87.22	-	-
22.....	-	-	91.76	93.68	93.28	-	89.78	88.22	-	-	-	-
23.....	-	-	91.76	93.68	-	-	-	-	-	-	-	-
24.....	-	-	-	93.68	93.28	-	89.78	-	-	-	-	-
25.....	-	-	91.76	-	-	-	-	88.22	87.52	87.22	-	-
26.....	-	-	-	93.68	93.28	-	89.58	-	-	-	-	-
27.....	-	-	91.56	93.68	93.28	-	-	88.22	87.52	-	-	-
28.....	-	-	91.90	-	-	-	89.58	-	87.52	87.12	-	-
29.....	-	-	92.10	93.68	-	-	-	-	-	-	-	-
30.....	-	-	93.18	93.58	93.28	91.90	89.58	88.22	-	87.12	-	-
31.....	-	-	-	-	93.28	-	89.58	-	-	87.12	-	-
1953												
1.....	-	-	86.23	90.38	93.86	-	92.96	89.38	87.74	87.64	-	-
2.....	-	-	86.23	-	-	93.26	-	89.38	87.74	87.64	-	-
3.....	-	-	-	90.76	93.86	-	-	89.29	87.74	87.64	-	-
4.....	-	-	86.23	90.86	-	-	92.96	89.19	87.74	87.24	-	-
5.....	-	-	-	91.76	-	-	-	89.29	87.74	87.24	-	-
6.....	-	-	-	91.26	-	-	-	89.19	87.74	87.24	-	-
7.....	-	-	86.23	91.36	-	-	-	89.20	87.74	87.24	-	-
8.....	-	-	-	91.46	-	93.16	-	89.19	87.74	87.24	-	-
9.....	-	-	86.33	-	93.86	93.16	92.38	89.19	87.74	87.24	-	-
10.....	-	-	86.43	91.56	-	-	-	89.19	87.74	87.04	-	-
11.....	-	-	86.84	91.56	93.16	-	92.18	89.19	87.74	87.04	-	-
12.....	-	-	87.04	-	93.16	-	-	89.09	87.74	87.04	-	-
13.....	-	-	87.24	91.66	-	-	-	89.09	87.64	87.04	-	-
14.....	-	-	-	-	-	-	-	89.09	87.64	87.04	-	-
15.....	-	-	-	-	-	-	91.06	89.09	87.64	87.04	-	-
16.....	-	-	87.44	91.66	93.06	93.16	90.96	89.09	87.64	87.04	-	-
17.....	-	-	-	-	-	-	-	88.99	87.64	87.04	-	-
18.....	-	-	87.48	91.66	-	-	-	88.99	87.64	87.04	-	-
19.....	-	-	87.54	-	-	-	-	88.99	87.64	87.04	-	-
20.....	-	-	-	-	-	93.16	-	88.99	87.64	87.04	-	-
21.....	-	-	87.74	91.86	93.06	-	-	88.99	87.64	87.04	-	-
22.....	-	-	-	92.68	93.06	-	-	88.89	87.64	87.04	-	-
23.....	-	-	87.74	93.16	-	93.16	-	-	87.38	87.04	-	-
24.....	-	-	87.74	93.66	-	-	-	-	87.64	86.94	-	-
25.....	-	-	-	93.76	-	93.09	-	-	87.64	86.94	-	-
26.....	-	-	87.64	93.76	-	-	89.38	-	87.64	86.94	-	-
27.....	-	-	87.64	-	93.06	-	89.28	-	87.64	-	-	-
28.....	-	-	87.84	93.86	93.06	-	89.19	-	87.64	86.91	-	-
29.....	-	-	88.59	-	93.06	-	89.19	-	87.64	86.94	-	-
30.....	-	-	89.19	-	-	-	89.48	-	87.64	86.94	-	-
31.....	-	-	-	-	-	-	89.38	-	-	-	-	-

Daily Elevations in Feet for Calendar Years 1954 and 1955

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1954												
1.....	-	-	86.43	-	91.66	-	-	-	86.63	-	-	-
2.....	-	-	-	-	-	-	91.06	-	-	86.64	-	-
3.....	-	-	86.43	-	91.66	91.36	-	-	-	-	-	-
4.....	-	-	-	86.53	-	-	-	-	86.63	86.58	-	-
5.....	-	-	86.43	-	91.66	91.36	90.96	86.73	-	-	-	-
6.....	-	-	-	-	91.66	91.36	-	-	-	-	-	-
7.....	-	-	-	86.73	91.66	91.36	-	86.73	86.53	-	-	-
8.....	-	-	86.43	87.04	91.66	-	-	-	-	86.58	-	-
9.....	-	-	-	87.24	91.56	91.36	-	86.73	-	-	-	-
10.....	-	-	-	87.84	91.56	-	90.48	-	86.43	-	-	-
11.....	-	86.50	86.43	88.19	91.56	91.46	90.18	-	-	-	-	-
12.....	-	-	-	88.49	91.56	91.46	89.78	86.73	86.53	-	-	-
13.....	-	-	86.53	89.19	91.56	-	89.58	-	-	86.56	-	-
14.....	-	-	-	90.18	91.56	-	89.48	86.73	-	-	-	-
15.....	-	-	-	90.66	91.56	-	89.29	-	86.57	86.49	-	-
16.....	-	-	-	90.66	-	91.46	-	-	86.63	86.56	-	-
17.....	-	-	86.53	91.06	-	-	-	-	86.63	-	-	-
18.....	-	-	-	91.36	-	-	-	-	86.63	86.48	-	-
19.....	-	-	-	91.46	-	91.46	-	-	-	-	-	-
20.....	-	-	86.53	91.46	91.46	-	-	-	86.64	-	-	-
21.....	-	-	-	91.56	-	-	-	-	-	86.41	-	-
22.....	-	-	-	91.56	-	-	-	-	-	-	-	-
23.....	-	-	-	91.66	-	-	-	-	-	86.41	-	-
24.....	-	-	-	91.76	91.46	91.30	87.33	-	86.63	-	-	-
25.....	-	-	-	91.76	91.36	91.26	-	-	-	-	-	-
26.....	-	-	-	91.76	-	91.16	-	-	-	86.39	-	-
27.....	-	-	86.53	91.76	91.46	-	-	-	86.64	-	-	-
28.....	-	-	-	91.76	91.36	91.16	-	-	-	86.38	-	-
29.....	-	-	-	-	91.36	-	87.34	-	-	-	-	-
30.....	-	-	86.53	-	-	-	-	-	86.64	86.37	-	-
31.....	-	-	-	-	-	-	-	-	-	-	-	-
1955												
1.....	-	-	85.73	89.58	-	91.56	-	-	86.65	-	-	-
2.....	-	-	85.73	91.56	-	-	91.16	-	86.63	85.23	-	-
3.....	-	-	85.73	91.40	91.76	-	-	-	86.58	85.20	-	-
4.....	-	-	-	-	-	91.56	91.16	90.69	-	85.11	-	-
5.....	-	-	85.73	91.85	-	-	-	90.56	86.48	84.91	-	-
6.....	-	-	-	91.88	91.76	91.56	-	90.43	-	-	-	-
7.....	-	-	-	91.92	-	-	-	90.27	86.35	-	-	-
8.....	-	-	85.73	92.24	-	91.56	91.26	90.18	-	-	-	-
9.....	-	-	85.73	93.96	91.76	-	-	89.50	86.26	84.70	-	-
10.....	-	-	85.93	95.42	-	91.46	-	88.88	86.17	84.65	-	-
11.....	-	-	85.89	94.79	91.69	-	91.26	88.69	-	84.61	-	-
12.....	-	-	86.01	94.42	91.66	-	-	88.60	86.06	84.57	-	-
13.....	-	-	86.01	94.07	-	91.46	91.36	88.55	-	84.40	-	-
14.....	-	-	86.05	93.80	-	-	-	-	86.01	-	-	-
15.....	-	-	86.05	-	-	-	-	-	-	84.27	-	-
16.....	-	-	86.13	-	91.66	91.46	91.26	-	-	84.19	-	-
17.....	-	-	86.17	-	-	-	-	-	-	84.15	-	-
18.....	-	-	-	-	-	-	91.26	-	-	84.06	-	-
19.....	-	-	86.17	-	91.66	-	-	-	-	84.02	-	-
20.....	-	-	86.19	-	-	91.36	-	-	-	84.07	-	-
21.....	-	-	86.19	-	-	-	-	-	-	84.07	-	-
22.....	-	-	-	91.76	-	-	91.26	-	-	84.13	-	-
23.....	-	-	86.19	91.76	91.66	91.26	-	-	85.43	84.01	-	-
24.....	-	-	-	91.76	-	-	-	-	85.43	84.04	-	-
25.....	-	-	-	91.76	-	-	-	87.10	85.37	83.98	-	-
26.....	-	-	86.13	-	91.56	91.26	-	87.07	-	83.97	-	-
27.....	-	-	-	91.76	-	-	-	86.96	85.46	83.99	-	-
28.....	-	-	86.13	-	-	91.16	-	86.89	-	83.98	-	-
29.....	-	-	86.13	-	-	91.19	-	-	85.43	83.96	-	-
30.....	-	-	87.41	91.76	-	-	-	86.80	85.36	83.93	-	-
31.....	-	-	88.44	-	91.54	-	-	-	-	83.90	-	-

Daily Elevations in Feet for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	2,873.31	2,874.86	2,880.78	2,876.76	-	-	-	-	-	-
2.....	-	-	-	-	-	2,876.67	2,876.14	-	-	-	-	-
3.....	-	-	-	2,876.98	2,880.75	-	-	2,870.81	-	-	-	-
4.....	-	-	-	2,877.90	-	2,876.58	2,876.12	-	-	-	-	-
5.....	-	-	-	-	2,880.73	-	-	2,870.61	-	-	-	-
6.....	-	-	-	2,879.21	-	2,876.56	2,876.09	-	-	-	-	-
7.....	-	-	-	2,879.41	2,880.72	-	-	2,870.53	-	-	-	-
8.....	-	-	-	2,879.71	2,880.70	2,876.54	2,875.99	2,870.54	-	-	-	-
9.....	-	-	-	2,879.85	-	2,876.51	-	2,870.52	-	-	-	-
10.....	-	-	-	-	-	2,876.51	2,875.68	2,870.52	-	-	-	-
11.....	-	-	-	2,880.11	2,880.64	-	-	-	-	-	-	-
12.....	-	-	-	2,880.30	-	-	2,875.29	2,870.52	-	-	-	-
13.....	-	-	-	2,880.36	2,880.44	2,876.47	-	-	-	-	-	-
14.....	-	-	-	2,880.57	2,880.30	-	2,874.88	-	-	-	-	-
15.....	-	-	2,873.34	2,880.66	-	2,876.46	2,874.69	-	-	-	-	-
16.....	-	-	-	2,880.69	-	-	-	-	-	-	-	-
17.....	-	-	-	-	2,879.86	2,876.44	2,874.34	-	-	-	-	-
18.....	-	-	-	-	2,879.73	-	-	-	-	-	-	-
19.....	-	-	-	2,880.79	-	2,876.41	2,873.84	-	-	-	-	-
20.....	-	-	-	-	2,879.19	-	2,873.48	-	-	-	-	-
21.....	-	-	-	2,880.81	-	2,876.39	-	-	-	-	-	-
22.....	-	-	-	-	2,878.73	-	2,873.07	-	-	-	-	-
23.....	-	-	-	2,880.82	-	-	-	-	-	-	-	-
24.....	-	-	-	-	2,878.28	2,876.31	-	-	-	-	-	-
25.....	-	-	-	2,880.82	-	-	-	-	-	-	-	-
26.....	-	-	-	-	2,877.89	2,876.20	2,872.19	-	-	-	-	-
27.....	-	-	2,873.32	2,880.83	-	-	-	-	-	-	-	-
28.....	-	-	-	-	-	2,876.11	2,871.74	-	-	-	-	-
29.....	-	-	2,873.32	2,880.81	2,877.22	-	-	-	-	2,869.50	-	-
30.....	-	-	-	-	-	2,876.17	-	-	-	-	-	-
31.....	-	-	2,873.61	-	2,876.88	-	2,871.21	-	-	-	-	-

Location: Lat. 49° 58', long. 109° 31', in NE. 1/4 sec. 5, tp. 12, rge. 26, W. 3rd Mer., Saskatchewan, at confluence of Gap and Maple creeks and about six miles north of Town of Maple Creek. Gauge: Wire-weight. Period of Record: Part-year records, 1940 to 1943 and 1945 to 1949; mainly March to October, 1950 to date. Extremes Recorded: Daily - Maximum, 10 April 1955, 2,453.31 feet, Minimum, 25 July 1946, 2,410.02 feet. Revisions: The water elevations as shown in tabular form in W.R.P. 88 are for the year 1940 and not 1941. Remarks: All elevations are referred to bench mark, stub pipe on top of gate well (assumed elevation of 2,453.89 feet). P.F.R.A. information indicates correct elevation of this bench mark is 2,488.14 feet. Water from Gap and Maple creeks is impounded for use in irrigation projects along Maple Creek downstream. Daily water elevations for years 1950 to 1955 are included in this paper. The following water elevations were obtained in 1946: 12 March, 2,432.90; 21 March, 2,436.55; 10 May, 2,432.21; 16 June, 2,411.27; 25 July, 2,410.02. The following water elevations were obtained in 1948: 26 April, 2,444.12; 1 June, 2,438.95; 23 July, 2,434.35; 26 August 2,431.25.

Daily Elevations in Feet for Calendar Years 1950 and 1951

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1950												
1.....	-	-	-	-	-	-	-	-	-	-	-	-
2.....	-	-	-	-	-	-	-	-	-	-	-	-
3.....	-	-	-	-	-	-	-	-	-	-	-	-
4.....	-	-	-	-	-	-	-	-	-	-	-	-
5.....	-	-	-	-	-	-	-	-	-	-	-	-
6.....	-	-	-	-	-	-	-	-	-	-	-	-
7.....	-	-	-	-	-	-	-	-	-	-	-	-
8.....	-	-	2,419.76	-	-	-	-	-	-	-	-	-
9.....	-	-	-	2,426.77	-	-	-	-	-	-	-	-
10.....	-	-	-	-	-	-	-	-	-	-	-	-
11.....	-	-	-	-	-	-	-	-	-	-	-	-
12.....	-	-	2,422.05	-	-	-	-	-	-	-	-	-
13.....	-	-	-	-	-	-	-	-	-	-	-	-
14.....	-	-	-	-	-	-	-	-	-	-	-	-
15.....	-	-	-	-	-	-	-	-	-	-	-	-
16.....	-	-	-	2,428.63	-	-	-	2,427.73	2,427.73	-	-	-
17.....	-	-	-	-	-	-	-	-	-	-	-	-
18.....	-	-	-	-	-	-	2,423.03	-	-	-	-	-
19.....	-	-	-	-	-	-	-	-	-	-	-	-
20.....	-	-	-	-	-	-	-	-	-	-	-	-
21.....	-	-	-	-	2,425.31	-	-	-	-	-	-	-
22.....	-	-	-	-	-	-	-	-	-	-	-	-
23.....	-	-	-	-	-	-	-	-	-	2,427.99	-	-
24.....	-	-	2,423.84	-	-	-	-	-	-	-	-	-
25.....	-	-	-	-	-	-	-	-	-	-	-	-
26.....	-	-	-	-	-	-	-	-	-	-	-	-
27.....	-	-	-	-	-	-	-	-	-	-	-	-
28.....	-	-	-	-	-	-	-	-	-	-	-	-
29.....	-	-	-	-	-	-	-	-	-	-	-	-
30.....	-	-	-	-	-	-	-	-	-	-	-	-
31.....	-	-	-	-	-	-	-	-	-	-	-	-
1951												
1.....	-	-	-	-	-	-	2,449.44	-	-	-	-	-
2.....	-	-	-	-	-	-	-	-	-	-	-	-
3.....	-	-	-	-	-	-	-	-	-	-	-	-
4.....	-	-	-	2,444.05	-	-	-	-	-	-	-	-
5.....	-	-	-	-	-	-	-	-	-	-	-	-
6.....	-	-	-	-	-	-	-	-	2,449.00	-	-	-
7.....	-	-	-	-	-	-	-	-	-	-	-	-
8.....	-	-	-	2,447.32	-	-	-	-	-	-	-	-
9.....	-	-	-	-	-	-	-	-	-	-	-	-
10.....	-	-	-	-	-	-	-	-	-	-	-	-
11.....	-	-	-	-	-	-	-	-	-	-	-	-
12.....	-	-	-	2,448.01	-	-	-	-	-	-	-	-
13.....	-	-	-	-	-	-	-	-	-	-	-	-
14.....	-	-	-	-	-	-	-	-	-	-	-	-
15.....	-	-	-	-	-	-	-	-	-	-	-	-
16.....	-	-	-	-	-	-	-	-	-	-	-	-
17.....	-	-	-	2,448.01	-	-	-	-	-	-	-	-
18.....	-	-	-	-	-	-	-	-	-	-	-	-
19.....	-	-	-	-	-	-	2,448.90	-	-	-	-	-
20.....	-	-	-	2,447.93	-	-	-	-	-	-	-	-
21.....	-	-	-	-	-	-	-	-	-	-	-	-
22.....	-	-	-	-	-	-	-	-	-	-	-	-
23.....	-	-	-	2,447.66	-	-	-	-	-	2,447.99	-	-
24.....	-	-	-	-	2,448.79	-	-	-	-	-	-	-
25.....	-	-	-	-	-	-	-	-	-	-	-	-
26.....	-	-	-	-	-	-	-	-	-	-	-	-
27.....	-	-	-	-	-	-	-	-	-	-	-	-
28.....	-	-	-	2,449.39	-	-	-	-	-	-	-	-
29.....	-	-	-	-	-	-	-	-	-	-	-	-
30.....	-	-	-	-	-	-	-	-	-	-	-	-
31.....	-	-	-	-	-	-	-	-	-	-	-	-

* - High water mark.

Daily Elevations in Feet for Calendar Years 1954 and 1955

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1954												
1.....	-	-	-	-	-	-	-	-	-	2,450.40	-	-
2.....	-	-	-	-	-	-	-	-	-	-	-	-
3.....	-	-	-	2,446.57	-	-	2,450.00	-	-	-	-	-
4.....	-	-	-	-	-	-	-	-	2,449.79	-	-	-
5.....	-	-	-	-	2,448.22	2,449.61	-	-	-	-	-	-
6.....	-	-	-	-	-	-	-	-	-	-	-	-
7.....	-	-	-	-	-	-	-	2,449.80	-	-	-	-
8.....	-	-	-	-	2,448.64	-	-	-	-	-	-	-
9.....	-	-	-	-	-	-	-	-	-	2,450.67	-	-
10.....	-	-	-	2,447.43	2,448.91	-	2,449.84	-	-	-	-	-
11.....	-	2,446.29	2,446.44*	-	-	-	-	-	2,449.84	-	-	-
12.....	-	-	-	-	-	2,449.93	-	-	-	-	-	-
13.....	-	-	-	-	-	-	-	-	-	-	-	-
14.....	-	-	-	-	-	-	-	2,449.82	2,449.80	-	-	-
15.....	-	-	-	2,448.06	2,449.48	-	-	-	-	-	-	-
16.....	-	-	-	2,448.15	-	-	-	-	-	2,450.46	-	-
17.....	-	-	-	-	-	-	2,449.80	-	-	-	-	-
18.....	-	-	-	-	-	-	-	-	2,449.93	-	-	-
19.....	-	-	-	-	-	-	-	-	-	-	-	-
20.....	-	-	-	-	-	-	-	-	-	-	-	-
21.....	-	-	-	-	-	-	-	2,449.78	-	-	-	-
22.....	-	-	-	2,448.45	2,449.58	-	-	-	-	-	-	-
23.....	-	-	-	-	-	-	-	-	2,450.32	2,449.00	-	-
24.....	-	-	-	2,448.48	-	2,450.27	2,449.77	-	-	-	-	-
25.....	-	-	-	-	-	-	-	-	-	-	-	-
26.....	-	-	-	-	2,449.54	2,450.17	-	-	-	-	-	-
27.....	-	-	2,444.61*	-	-	-	-	-	-	-	-	-
28.....	-	-	-	-	-	-	-	2,449.84	-	-	-	-
29.....	-	-	-	-	2,449.56	-	2,449.69	-	-	-	-	-
30.....	-	-	2,444.62*	-	-	-	-	-	-	-	-	-
31.....	-	-	-	-	-	-	2,449.72	-	-	-	-	-
1955												
1.....	-	-	-	2,451.24	-	-	-	-	-	-	-	-
2.....	-	-	-	2,451.14	-	-	2,449.29	-	-	-	-	-
3.....	-	-	-	-	-	-	-	-	2,448.92	2,448.85	-	-
4.....	-	-	-	-	-	2,449.23	-	2,449.23	-	-	-	-
5.....	-	-	-	-	-	-	-	-	-	-	-	-
6.....	-	-	-	-	-	-	-	2,449.20	-	-	-	-
7.....	-	-	-	-	2,450.06	-	-	-	-	-	-	-
8.....	-	-	-	-	-	-	-	-	-	2,448.87	-	-
9.....	-	-	-	2,452.07	-	-	2,449.64	-	-	-	-	-
10.....	-	-	-	2,453.31	2,449.87	-	-	-	2,448.82	-	-	-
11.....	-	-	2,449.38	2,452.96	2,449.73	2,449.24	-	-	-	-	-	-
12.....	-	-	-	2,451.61	-	-	-	-	-	-	-	-
13.....	-	-	-	-	-	-	-	-	-	-	-	-
14.....	-	-	-	-	2,449.54	-	-	-	-	-	-	-
15.....	-	-	-	-	-	-	-	2,449.05	-	2,448.83	-	-
16.....	-	-	-	2,449.27	-	-	2,450.04	-	-	-	-	-
17.....	-	-	2,449.70	-	-	-	-	-	2,448.75	-	-	-
18.....	-	-	-	-	-	2,449.31	-	-	-	-	-	-
19.....	-	-	-	-	-	-	-	-	-	-	-	-
20.....	-	-	-	-	-	-	-	2,448.93	-	-	-	-
21.....	-	-	-	-	2,449.74	-	-	-	-	-	-	-
22.....	-	-	-	2,448.93	-	-	-	-	-	2,448.80	-	-
23.....	-	-	-	2,448.55	-	-	2,449.34	-	-	-	-	-
24.....	-	-	-	-	-	-	-	-	2,448.84	-	-	-
25.....	-	-	-	-	-	2,449.24	-	2,449.01	-	-	-	-
26.....	-	-	-	-	-	-	-	-	-	2,448.87	-	-
27.....	-	-	-	-	-	-	-	2,449.00	2,448.85	-	-	-
28.....	-	-	-	-	2,449.08	-	-	-	-	-	-	-
29.....	-	-	-	-	-	2,449.27	2,449.14	-	-	2,448.90	-	-
30.....	-	-	-	2,448.56	-	-	-	-	-	-	-	-
31.....	-	-	-	-	2,449.20	-	-	-	-	-	-	-

* - Reading taken to top of ice.

Daily Elevations in Feet for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	-	-	-	-	-	-	-	-	-
2.....	-	-	-	-	2,419.23	-	-	2,416.10	-	-	-	-
3.....	-	-	-	2,420.09	-	-	-	-	2,415.83	-	-	-
4.....	-	-	2,446.93	-	-	-	2,417.77	-	-	2,415.59	-	-
5.....	-	-	-	-	-	-	-	-	-	-	-	-
6.....	-	-	-	-	-	2,418.24	-	-	2,415.77	2,415.60	-	-
7.....	-	-	-	-	-	-	-	-	-	-	-	-
8.....	-	-	-	-	-	-	-	2,416.00	-	-	-	-
9.....	-	-	-	2,420.37	-	2,418.23	-	2,415.99	-	-	-	-
10.....	-	-	-	-	2,419.26	-	-	-	-	-	-	-
11.....	-	-	-	-	-	-	-	-	-	-	-	-
12.....	-	-	-	2,420.26	-	-	-	-	-	-	-	-
13.....	-	-	-	-	2,419.24	-	-	-	2,415.68	-	-	-
14.....	-	-	-	-	2,419.23	2,418.17	-	-	-	-	-	-
15.....	-	-	-	-	-	-	-	-	-	-	-	-
16.....	-	-	-	-	-	-	-	-	-	-	-	-
17.....	-	-	-	-	2,419.10	-	-	-	-	-	-	-
18.....	-	-	-	-	-	-	-	-	-	2,415.60	-	-
19.....	-	-	-	2,419.55	-	-	2,416.81	-	-	-	-	-
20.....	-	-	-	-	-	-	-	-	2,415.63	-	-	-
21.....	-	-	-	-	-	2,418.14	-	-	-	-	-	-
22.....	-	-	-	-	-	-	-	-	-	-	-	-
23.....	-	-	-	-	-	-	-	2,415.77	-	-	-	-
24.....	-	-	-	-	2,418.37	-	-	-	-	-	-	-
25.....	-	-	-	-	-	-	-	-	-	2,415.57	-	-
26.....	-	-	-	2,419.19	-	-	2,416.29	-	-	-	-	-
27.....	-	-	-	-	-	-	-	-	2,415.65	-	-	-
28.....	-	-	-	-	-	2,418.10	-	-	-	-	-	-
29.....	-	-	-	-	-	-	-	-	-	2,415.45	-	-
30.....	-	-	-	-	-	-	-	2,415.88	-	-	-	-
31.....	-	-	-	-	2,418.04	-	-	-	-	-	-	-

CYPRESS LAKE - STATION No. 11AC₃₇

(International Gauging Station)

Location: Lat. 49° 29', long. 109° 24', in SE. 1/4 sec. 23, tp. 6, rge. 26, W. 3rd Mer., Saskatchewan, at East Dam, about twelve miles north of Vidora. Gauge: Recording and staff. Period of Record: Part-year records 1917 to 1930 and 1935 to 1938 on lake prior to reservoir construction; March to October, 1939 to date, on present reservoir. Prior to 30 April 1955, records on reservoir based on staff gauge readings at East and West Dams. Extremes Recorded: On natural lake: Daily - Maximum, 8 June 1927, elevation, 3,155.89 feet, Minimum, dry at various times in 1938. Maximum on present reservoir: 21 April 1955 (elevation 3,169.69 feet) 117,300 acre-feet. Revisions: Data to 1950 inclusive were reviewed in co-operation with the United States Geological Survey and revised data are available upon application to the District Engineer at Calgary, for address see page 8. Revised data for 1951 to 1954 may also be obtained from the Calgary District office. Remarks: This is one of a number of stations which are maintained jointly by Canada and the United States. Prior to 1947, records were collected by Canada only. Elevations are based on Reclamation Service datum. To convert to Geodetic Survey of Canada datum, add 34.54 feet. Water is diverted to lake from Battle Creek and Frenchman River and may be released to either stream for irrigation projects downstream.

Elevations in Feet and Contents in Acre-feet for Calendar Year 1958

Month	Elevation at End of Month	Contents at End of Month	Change in Contents During Month
January	-	-	-
February	3,165.75	94,400	-
March	3,165.98	95,710	+ 1,310
April	3,168.68	111,300	+15,590
May	3,168.08	107,800	- 3,500
June	3,167.23	102,900	- 4,900
July	3,166.01	95,890	- 7,010
August	3,165.01	90,160	- 5,730
September	3,164.46	87,030	- 3,130
October	3,164.32	86,230	- 800
November	-	-	-
December	-	-	-
The Period	-	-	- 8,170

DOWLING LAKE BASIN

DOWLING LAKE NEAR DOWLING - STATION No. 5CF₂

Location: Lat. 51° 46', long. 112° 00', in NE. 1/4 sec. 24, tp. 32, rge. 15, W. 4th Mer., about one mile southwest of Dowling and about ten miles north of Hanna. Gauge: Measuring point. Period of Record: Occasional observations 1957 to date. Remarks: Gauge heights are referred to a standard iron bench mark located about 150 feet north of lakeshore, gauge height 100.00 feet. The following gauge heights were obtained in 1958: 19 April, 96.91 feet; 13 November, 95.29 feet.

WOOD RIVER NEAR LAFLECHE - STATION No. 5JA₂

Location: Lat. 49° 40', long. 106° 42', in NW. 1/4 sec. 24, tp. 8, rge. 6, W. 3rd Mer., Saskatchewan, about six miles southwest of Lafleche and about twenty-six miles upstream from confluence with Notukeu Creek. Drainage Area: 2,000 square miles. Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: March to June, 1944 to 1956 and March to October, 1957 to date. Prior to 1957, records were obtained from a wire-weight gauge in SE. 1/4 sec. 16 (corrected), about six miles downstream. Extremes Recorded: Daily - Maximum, 9 April 1952, 10,280 cfs, Minimum, Nil at various times. Remarks: Records good during open-water period and fair during ice period. The station was relocated in 1957 after construction of Lafleche Reservoir drowned out the former site. Records were obtained from 1918 to 1925 and 1935 to 1936 at a site about sixteen miles downstream from present site and published under title "near Gravelbourg".

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	Nil b	905b	9.9	0.2	0.0	Nil	Nil	Nil	-	-
2.....	-	-	"	1,170	9.2	0.2	0.0	"	"	"	-	-
3.....	-	-	"	1,650	9.0	0.2	0.0	"	"	"	-	-
4.....	-	-	"	1,580	7.7	0.1	0.0	"	"	"	-	-
5.....	-	-	"	1,020	6.8	0.1	Nil	"	"	"	-	-
6.....	-	-	"	556	6.0	0.1	"	"	"	"	-	-
7.....	-	-	"	343	5.4	0.1	"	"	"	"	-	-
8.....	-	-	"	244	4.5	0.1	"	"	"	"	-	-
9.....	-	-	"	200	4.0	0.1	"	"	"	"	-	-
10.....	-	-	"	168	3.4	0.1	"	"	"	"	-	-
11.....	-	-	"	136	3.1	0.1	"	"	"	"	-	-
12.....	-	-	"	107	2.6	0.1	"	"	"	"	-	-
13.....	-	-	"	88e	2.0	0.1	"	"	"	"	-	-
14.....	-	-	"	69	2.0	0.1	"	"	"	"	-	-
15.....	-	-	"	58	1.9	0.1	"	"	"	"	-	-
16.....	-	-	"	49.1	1.6	0.1	"	"	"	"	-	-
17.....	-	-	"	40.9	0.9	0.1	"	"	"	"	-	-
18.....	-	-	"	34.0	0.8	0.1	"	"	"	"	-	-
19.....	-	-	"	28.7	1.0	0.1	"	"	"	"	-	-
20.....	-	-	"	25.0	1.0	0.1	"	"	"	"	-	-
21.....	-	-	"	21.8	1.0	0.1	"	"	"	"	-	-
22.....	-	-	"	19.7	0.7	0.1	"	"	"	"	-	-
23.....	-	-	Nil	17.8	0.4	0.1	"	"	"	"	-	-
24.....	-	-	4	16.5	0.4	0.0	"	"	"	"	-	-
25.....	-	-	8	14.8	0.3	0.0	"	"	"	"	-	-
26.....	-	-	12	13.0	0.3	0.0	"	"	"	"	-	-
27.....	-	-	17	11.3	0.2	0.0	"	"	"	"	-	-
28.....	-	-	73	10.4	0.2	0.0	"	"	"	"	-	-
29.....	-	-	381	10.1	0.2	0.0	"	"	"	"	-	-
30.....	-	-	784	10.1	0.2	0.0	"	"	"	"	-	-
31.....	-	-	807	-	0.2	-	"	"	-	"	-	-
Mean	-	-	67.3	287	2.80	0.09	0.00	Nil	Nil	Nil	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	4,140	17,090	172	5.2	0.0	Nil	Nil	Nil	-	-

The Period..... Discharge: Daily - Maximum 3 April, 1,650
 (245 days) - Minimum at various times, Nil
 Instantaneous Maximum 7 p.m., 3 April, 2,060
 Mean 44.1
 Runoff: Acre-feet 21,410

b - Ice conditions 1 March to 1 April.

e - Estimated.

Location: Lat. 49° 54', long. 107° 18', in NW. 1/4 sec. 10, tp. 11, rge. 10, W. 3rd Mer., Saskatchewan, about one mile south of Vanguard and one mile below confluence with Russell Creek. Drainage Area: 1,420 square miles. Gauge: Wire-weight. Measurement of Discharge: From bridge or by wading. Period of Record: Continuous August 1914 to February 1923; part-year records 1940 and 1944 to date. Data for period October 1922 to February 1923 were combined with data for Notukeu Creek at Gravelbourg and published under that title. Average Discharge: (8 years) - 42.7 cfs. Extremes Recorded: Daily - Maximum, 7 April 1952, 7,340 cfs (estimated), Minimum, Nil at various times; Instantaneous Maximum - 4 p.m., 7 April 1952, 8,000 cfs (estimated). Revisions: 1916, W.R.P. 117. Remarks: Records fair. Discharge is affected by small storage reservoirs on upstream tributaries.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	10b	2,650	26.2	18.4	7.5	6.0	1.9e	0.1	-	-
2.....	-	-	20	2,920	25.1	21.0	8.5	5.8	1.6e	0.1	-	-
3.....	-	-	24	2,790	26.6	21.7	8.8	5.4	1.4e	0.1	-	-
4.....	-	-	16	1,790	25.4	24.3	6.9	4.9	1.2e	0.1	-	-
5.....	-	-	14	891	22.1	23.5	6.9	4.5	1.0	0.1	-	-
6.....	-	-	14	552	21.7	21.4	6.5	3.6	0.8	0.0	-	-
7.....	-	-	12	327	21.0	21.0	6.0	3.1	0.8	0.0	-	-
8.....	-	-	9	251	20.7	20.7	8.3	2.9	0.6	0.1	-	-
9.....	-	-	6	222	21.0	20.4	7.7	2.8	0.6	0.1	-	-
10.....	-	-	6	179	21.7	20.0	12.1	2.7	0.5	0.2	-	-
11.....	-	-	6	160	21.7	11.6	9.9	2.4	0.5	0.2	-	-
12.....	-	-	3	136	20.4	12.4	9.0	1.9	0.4	0.4	-	-
13.....	-	-	4	125	17.8	12.1	8.5	1.4	0.3	0.5	-	-
14.....	-	-	4	116	16.8	13.6e	8.5	1.5	0.3	0.6	-	-
15.....	-	-	3	108	16.5	15.1	7.5	1.3	0.3	0.6	-	-
16.....	-	-	3	98	18.7	15.1	7.5	1.2	0.3	0.6	-	-
17.....	-	-	3	93	16.5	15.3	7.7	1.1	0.4	0.7	-	-
18.....	-	-	2	86	14.8	18.7	7.7	1.1	0.3	0.6	-	-
19.....	-	-	1	88	14.5	16.8	7.7	1.2	0.3	0.7	-	-
20.....	-	-	1	79	14.5	21.0	7.9	1.4	0.3	0.8	-	-
21.....	-	-	1	73	14.8	16.5	7.9	1.3	0.3	1.5	-	-
22.....	-	-	1	61	15.1	14.8	7.9	1.4	0.3	1.5	-	-
23.....	-	-	1	49.0	14.5	14.8	8.8	1.2	0.2	1.6	-	-
24.....	-	-	6	40.9	14.2	14.5	8.1	0.9	0.2	1.6	-	-
25.....	-	-	18	34.4	14.2	20.0	8.1	0.8	0.2	1.5	-	-
26.....	-	-	30	33.4	15.1	20.7	7.1	0.7	0.2	1.3	-	-
27.....	-	-	35	32.9	16.5	13.4	6.5	1.1	0.2	1.1	-	-
28.....	-	-	137	29.6	16.5	11.1	5.4	1.2	0.2	0.9	-	-
29.....	-	-	466	29.1	16.2	8.8	5.6	1.1	0.2	0.9	-	-
30.....	-	-	896	30.0	17.8	7.3	5.8	2.3	0.2	0.8	-	-
31.....	-	-	1,620b	-	17.8	-	5.8	2.1e	-	0.8	-	-
Mean	-	-	109	469	18.6	16.9	7.68	2.27	0.53	0.65	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	6,690	27,920	1,140	1,000	472	139	32	40	-	-

The Period.....Discharge: Daily - Maximum 2 April, 2,920
 (245 days) - Minimum 6 and 7 October, 0.0
 Mean 77.0
 Runoff: Acre-feet 37,430

b - Ice conditions 1 to 31 March.

e - Estimated.

Gauge heights for period 28 March to 9 April are taken from plot of observed readings.

NOTUKEU CREEK NEAR GRAVELBOURG - STATION No. 5JB₃

Location: Lat. 49° 56', long. 106° 33', in NW. 1/4 sec. 19, tp. 11, rge. 4, W. 3rd Mer., Saskatchewan, four miles north of Gravelbourg and about five miles above confluence with Wood River. Drainage Area: 1,900 square miles. Gauge: Wire-weight. Measurement of Discharge: From bridge or by wading. Period of Record: Part-year records 1923 to 1925, 1935, 1936, 1940 and 1944 to date. Extremes Recorded: Daily - Maximum, 10 April 1952, 6,810 cfs (estimated), Minimum, Nil at various times. Revisions: 1952, W.R.P. 117. Remarks: Records fair. Discharge is affected by small storage reservoirs on upstream tributaries.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	<u>1b</u>	116	44.3	3.3	1.0	2.8	0.0	Nil	-	-
2.....	-	-	1	444b	41.8	3.3	1.0	2.4	0.0	"	-	-
3.....	-	-	1	857	40.8	4.0	1.5	1.9	0.0	"	-	-
4.....	-	-	1	1,070	38.8	4.2	0.5	1.6	0.0	"	-	-
5.....	-	-	1	1,230	35.5	<u>4.4</u>	1.0	1.2	0.0	"	-	-
6.....	-	-	1	1,480	34.5	4.2	0.9	1.2	0.0	"	-	-
7.....	-	-	1	<u>1,820</u>	31.3	4.0	1.3	1.9	0.0	"	-	-
8.....	-	-	1	1,510	29.5	3.8	2.0	2.8	0.0	"	-	-
9.....	-	-	1	1,400	27.3	3.4	2.1	2.6	0.0	"	-	-
10.....	-	-	6	941	26.0	3.2	1.6	0.3	0.0	"	-	-
11.....	-	-	8	602	24.3	3.0	1.9	0.1	0.0	"	-	-
12.....	-	-	48	427	20.6	2.8	2.6	<u>0.0</u>	0.0	"	-	-
13.....	-	-	74	308	17.8	2.8	2.6	0.0	0.0	"	-	-
14.....	-	-	34	241	17.4	3.0	<u>4.6</u>	0.0	0.0	"	-	-
15.....	-	-	20	196	17.1	3.2	3.2	0.0	0.0	"	-	-
16.....	-	-	12	149	17.1	3.0	3.6	0.0	0.0	"	-	-
17.....	-	-	10	137	14.8	2.4	4.0	0.2	0.0	"	-	-
18.....	-	-	9	122	12.4	2.2	4.4	0.3	0.0	"	-	-
19.....	-	-	9	117	11.8	2.1	4.0	0.4	0.0	"	-	-
20.....	-	-	8	103	10.8	2.0	3.8	0.0	0.0	"	-	-
21.....	-	-	8	96	10.2	1.9	3.8	0.0	<u>Nil</u>	"	-	-
22.....	-	-	7	94	9.6	1.3	4.0	0.0	"	"	-	-
23.....	-	-	7	88	8.2	1.0	4.6	0.0	"	"	-	-
24.....	-	-	7	82	7.4	1.3	4.2	0.0	"	"	-	-
25.....	-	-	5	77	6.7	1.3	4.2	0.0	"	"	-	-
26.....	-	-	8	70	5.3	1.3	3.6	0.0	"	"	-	-
27.....	-	-	14	59	4.4	1.1	3.2	0.0	"	"	-	-
28.....	-	-	36	54	4.0	0.6	3.0	0.0	"	"	-	-
29.....	-	-	44	47.9	4.7	0.5	2.8	0.0	"	"	-	-
30.....	-	-	46	<u>45.8</u>	4.0	<u>0.3</u>	2.8	0.0	"	"	-	-
31.....	-	-	<u>80</u>	-	<u>3.4</u>	-	3.0	0.0	-	"	-	-
Mean	-	-	16.2	466	18.8	2.50	2.80	0.64	0.00	Nil	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	994	27,740	1,150	149	172	39	0.0	Nil	-	-

The Period.....Discharge: Daily - Maximum 7 April, 1,820
 (245 days) - Minimum at various times, Nil
 Mean 62.2
 Runoff: Acre-feet 30,240

b - Ice conditions 1 March to 2 April. Gauge heights from graph of observed readings 1 to 12 April.

Location: Lat. 49° 54', long. 107° 22', in SE. 1/4 sec. 13, tp. 11, rge. 11, W. 3rd Mer., Saskatchewan, about three miles above confluence with Notukeu Creek. Drainage Area: 120 square miles. Gauge: Staff, Measurement of Discharge: From bridge or by wading. Period of Record: March to June, 1944 to 1956 and March to October, 1957 to date. Extremes Recorded: Daily - Maximum, 14 April 1952, 878 cfs (estimated), Minimum, Nil at various times. Revisions: 1944, W.R.P. 117. Remarks: Records fair. Discharge is affected by storage in reservoir of 2,000 acre-feet capacity, constructed in 1951 about eight miles above station.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	Nil b	840	3.2	1.4	1.3e	0.0	Nil	Nil	-	-
2.....	-	-	"	541	2.0	1.5	1.2e	0.0	"	"	-	-
3.....	-	-	"	233	1.5	8.8	1.0	0.0	"	"	-	-
4.....	-	-	"	80	1.6	3.2	0.9e	0.0	"	"	-	-
5.....	-	-	"	47.3	2.2	2.9	0.8e	0.0	"	"	-	-
6.....	-	-	"	27.1	2.7	3.0	0.7	0.0	"	"	-	-
7.....	-	-	"	18.1	2.0	1.6	0.1	0.0	"	"	-	-
8.....	-	-	"	12.0	2.0	1.0	1.7	0.0	"	"	-	-
9.....	-	-	"	12.0	2.3	0.4	1.6	0.0	"	"	-	-
10.....	-	-	"	12.5	2.9	0.6	3.0	0.0	"	"	-	-
11.....	-	-	"	7.8	2.7	0.2	3.8	0.0	"	"	-	-
12.....	-	-	"	5.2	1.4	0.9	2.4	0.0	"	"	-	-
13.....	-	-	"	8.6	0.8	0.7	1.2	0.2	"	"	-	-
14.....	-	-	"	8.2	3.3	2.6e	0.6	0.2	"	"	-	-
15.....	-	-	"	7.4	2.3	4.4	0.5	0.2	"	"	-	-
16.....	-	-	"	5.2	0.4	5.6	0.2	0.0	"	"	-	-
17.....	-	-	"	3.3	1.0	5.7	0.2	Nil	"	"	-	-
18.....	-	-	"	4.4	1.0	6.3	0.0	"	"	"	-	-
19.....	-	-	"	8.0	1.4	10.5	0.0	"	"	"	-	-
20.....	-	-	"	6.3	1.0	5.2	0.0	"	"	"	-	-
21.....	-	-	"	1.9	0.5	5.0	0.0	"	"	"	-	-
22.....	-	-	"	1.4	0.5	6.3	0.0	"	"	"	-	-
23.....	-	-	"	1.4	0.8	9.6	0.0	"	"	"	-	-
24.....	-	-	"	1.5	0.1	9.8	0.0	"	"	"	-	-
25.....	-	-	"	1.6	0.8	4.4	0.0	"	"	"	-	-
26.....	-	-	"	2.0	1.6	2.9	0.0	"	"	"	-	-
27.....	-	-	0	2.7	2.4	3.8	0.0	"	"	"	-	-
28.....	-	-	10	3.4	1.0	1.6	0.0	"	"	0.0e	-	-
29.....	-	-	37	3.7	1.4	0.8	0.0	"	"	0.1	-	-
30.....	-	-	80b	1.9	1.4	1.5	0.0	"	"	0.3	-	-
31.....	-	-	209	-	0.8	-	0.0	"	-	0.4e	-	-
Mean	-	-	10.8	63.6	1.58	3.74	0.68	0.02	Nil	0.03	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	666	3,790	97	223	42	1.2	Nil	1.6	-	-

The Period.....Discharge: Daily - Maximum 1 April, 840
 (245 days) - Minimum at various times, Nil
 Mean 9.91
 Runoff: Acre-feet 4,820

b - Ice conditions 1 to 30 March. e - Estimated.
 Gauge heights from graph of observed readings 27 March to 6 April.

KIYU LAKE BASIN

KIYU LAKE NEAR NETHERHILL - STATION No. 5GB₁

Location: Lat. 51° 35', long. 108° 53', in NE. 1/4 sec. 21, tp. 30, rge. 21, W. 3rd Mer., Saskatchewan, eight miles north and one mile west of Netherhill. Gauge: Reference point. Period of Record: Occasional observations 1957 to date. Extremes Recorded: Daily - Maximum, 5 June 1957, 95.83 feet, Minimum, 4 November 1958, 94.09 feet. Remarks: Gauge heights are referred to standard iron bench mark located along east-west fence running to Lake and straight west of abandoned farm buildings, gauge height 100.00 feet. The following gauge heights were obtained in 1958: 20 April, 95.36 feet; 4 November, 94.09 feet.

LITTLE MANITOU LAKE BASIN

LITTLE MANITOU LAKE AT MANITOU BEACH - STATION No. 5JJ₁

Location: Lat. 51° 43', long. 105° 27', in NW. 1/4 sec. 2, tp. 32, rge. 25, W. 2nd Mer., Saskatchewan, about three miles north of Watrous. Gauge: Staff. Period of Record: Part-year records 1918 to 1922, 1929, 1930 and 1957 to date. Records prior to 1957 published under title "near Watrous". Extremes Recorded: Daily - Maximum, 14 May 1922, 1,626.52 feet, Minimum, 3 November 1958, 1,617.29 feet. Remarks: Elevations are referred to bench mark described as one and one-half inch diameter pipe about three feet long, located about two feet from power pole and one foot from stone retaining wall, northwest of Pearce's Hotel, elevation 1,633.85 feet. Elevations prior to 1957 can be related to present data by adding 1,528.97 feet (this tie is approximate only, as the original bench mark has been damaged since 1930).

Daily Elevations in Feet for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	-	-	-	1,618.26	1,618.07	1,617.94	-	1,617.40	-	-
2.....	-	-	-	-	-	-	-	-	-	1,617.41	-	-
3.....	-	-	-	-	-	1,618.28	-	-	-	1,617.48	1,617.29	-
4.....	-	-	1,618.19	-	-	-	-	1,617.86	-	1,617.45	-	-
5.....	-	-	-	-	-	-	1,618.10	-	-	1,617.40	-	-
6.....	-	-	-	-	-	-	-	-	-	1,617.41	-	-
7.....	-	-	-	1,618.35	-	1,618.26	-	1,617.82	-	1,617.41	-	-
8.....	-	-	-	-	-	-	1,618.01	1,617.83	-	1,617.44	-	-
9.....	-	-	-	-	-	-	-	-	1,617.37	1,617.45	-	-
10.....	-	-	-	-	-	1,618.16	-	1,617.77	-	1,617.43	-	-
11.....	-	-	-	-	-	-	-	-	-	1,617.41	-	-
12.....	-	-	-	-	-	1,618.19	1,617.97	-	-	1,617.42	-	-
13.....	-	-	-	-	-	-	-	-	-	1,617.44	-	-
14.....	-	-	-	-	-	-	1,618.15	1,617.71	-	1,617.41	-	-
15.....	-	-	-	-	-	1,618.23	-	-	-	1,617.41	-	-
16.....	-	-	-	-	-	-	-	1,617.62	-	1,617.46	-	-
17.....	-	-	-	-	-	1,618.14	1,618.14	-	-	1,617.43	-	-
18.....	-	-	-	-	-	-	-	-	-	1,617.34	-	-
19.....	-	-	-	-	-	1,618.12	1,618.11	-	-	1,617.45	-	-
20.....	-	-	-	-	-	-	-	-	-	1,617.43	-	-
21.....	-	-	-	-	-	1,618.13	1,618.11	-	-	1,617.41	-	-
22.....	-	-	-	-	-	-	-	-	-	1,617.35	-	-
23.....	-	-	-	-	-	1,618.11	-	-	-	1,617.41	-	-
24.....	-	-	-	-	-	-	-	-	-	1,617.34	-	-
25.....	-	-	-	1,618.55	-	-	-	-	-	1,617.32	-	-
26.....	-	-	-	-	1,618.36	1,618.13	1,618.04	-	-	1,617.33	-	-
27.....	-	-	-	-	-	-	-	-	-	1,617.32	-	-
28.....	-	-	-	-	-	1,618.08	-	-	1,617.41	1,617.32	-	-
29.....	-	-	-	-	-	-	1,618.03	-	1,617.50	1,617.34	-	-
30.....	-	-	-	-	-	1,618.05	-	-	1,617.42	1,617.31	-	-
31.....	-	-	-	-	-	-	-	-	-	1,617.32	-	-

MONITOR CREEK NEAR MONITOR - STATION No. 5GA₃

Location: Lat. 51° 58', long. 110° 35', in SW. 1/4 sec. 6, tp. 35, rge. 4, W. 4th Mer., Alberta, one-half mile south of Monitor and about six miles above confluence with Sounding Creek. Drainage Area: 565 square miles. Gauge: Staff. Measurement of Discharge: From bridge or by wading. Period of Record: March to October, 1954 to date. Extremes Recorded: Daily - Maximum, 15 April 1956, 655 cfs, Minimum, Nil at various times; Instantaneous Maximum - about 9 p.m., 15 April 1956, 717 cfs. (A greater discharge is known to have occurred on 7 April 1952). Remarks: Records fair. Discharge is affected to a minor degree by small storage reservoirs on upstream tributaries.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	Nil b	5	2.9	0.5	0.2	Nil	Nil	0.0	-	-
2.....	-	-	"	93	2.9	0.6	0.3	"	"	0.0	-	-
3.....	-	-	"	211	2.8	0.8	0.3	"	"	0.0	-	-
4.....	-	-	"	344	2.7	0.7	0.3	"	"	0.0	-	-
5.....	-	-	"	447b	2.5	0.7	0.2e	"	"	0.0	-	-
6.....	-	-	"	333	2.4	0.6	0.2	2.6	"	0.0	-	-
7.....	-	-	"	152	2.4	0.5	0.2	3.1	"	0.0	-	-
8.....	-	-	"	77	2.4	0.4	0.2	2.0	"	Nil	-	-
9.....	-	-	"	58	2.3	0.4	0.2	1.6	"	"	-	-
10.....	-	-	"	41.0	2.1	0.3	0.2	1.1	"	"	-	-
11.....	-	-	"	30.4	2.1	0.4	0.2	0.6	"	"	-	-
12.....	-	-	"	26.5	2.0	0.4	0.2	0.3	"	"	-	-
13.....	-	-	"	22.8	1.8	0.4	0.2	0.2	"	"	-	-
14.....	-	-	"	17.5	1.6	0.4	0.2	0.2	"	"	-	-
15.....	-	-	"	14.1	1.4	0.3	0.2	0.1	"	"	-	-
16.....	-	-	"	11.8	1.4	0.3	0.2	0.1	"	"	-	-
17.....	-	-	"	10.3	1.3	0.3	0.2	0.0	"	"	-	-
18.....	-	-	"	9.2	1.2	0.5	0.2	0.0	"	"	-	-
19.....	-	-	"	8.0	1.2	0.6	0.2	Nil	"	"	-	-
20.....	-	-	"	7.4	1.1	0.8	0.2	"	"	"	-	-
21.....	-	-	"	7.9	1.1	0.7	0.2	"	"	"	-	-
22.....	-	-	"	7.0	1.0	0.6	0.1	"	"	"	-	-
23.....	-	-	"	7.0	1.0	0.5	0.1e	"	0.0	"	-	-
24.....	-	-	"	5.8	0.9	0.5	0.1	"	0.1	"	-	-
25.....	-	-	"	5.0	0.9	0.4	Nil	"	0.1	"	-	-
26.....	-	-	"	4.2	0.7	0.3	"	"	0.1	"	-	-
27.....	-	-	"	4.2	0.6	0.3	"	"	0.0	"	-	-
28.....	-	-	"	3.8	0.6	0.3	"	"	0.0	"	-	-
29.....	-	-	"	3.6	0.6	0.3	"	"	0.0	"	-	-
30.....	-	-	"	3.0	0.5	0.3	"	"	0.0	"	-	-
31.....	-	-	"	-	0.5	-	"	"	-	"	-	-
Mean	-	-	Nil	65.7	1.58	0.47	0.15	0.38	0.01	0.00	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	Nil	3,910	97	28	9.5	24	0.6	0.0	-	-

The Period.....Discharge: Daily - Maximum 5 April, 447
 (245 days) - Minimum at various times, Nil
 Instantaneous Maximum 10 a.m., 5 April, 462
 Mean 8.37
 Runoff: Acre-feet 4,070

b - Ice conditions 1 March to 5 April.

Gauge heights from graph of observed readings 1 to 5 April.

e - Estimated.

GOOSEBERRY LAKE NEAR CONSORT - STATION No. 5GA₅

Location: Lat. 52° 07', long. 110° 46', in NW. 1/4 sec. 23, tp. 36, rge. 6, W. 4th Mer., Alberta, at extreme west end of lake and seven miles north of Consort. Gauge: Measuring point. Period of Record: Occasional observations 1955 to date. Extremes Recorded: Daily - Maximum, 12 July 1956, 90.97 feet, Minimum, 16 September 1955, 89.43 feet. Remarks: Gauge heights are referred to bench mark, top of eye bolt driven into ground near boulder fifty feet east and eight hundred feet north of highway bridge near west end of lake, gauge height 100.00 feet. The following gauge heights were obtained in 1958: 7 April, 90.78 feet; 16 May, 90.65 feet; 3 November, 89.51 feet.

SOUNDING LAKE NEAR MONITOR - STATION No. 5GA₄

Location: Lat. 52° 09', long. 110° 34', in SW. 1/4 sec. 6, tp. 37, rge. 4, W. 4th Mer., Alberta, at extreme west end of lake and eleven miles north of Monitor. Gauge: Measuring point. Period of Record: Occasional observations 1955 to date. Extremes Recorded: Daily - Maximum, 19 May 1956, 95.43 feet, Minimum, 3 November 1958, 93.15 feet. Remarks: Gauge heights are referred to bench mark, top of plate on iron pin thirty feet east of trail and one hundred feet south of fill, which replaces former bridge, gauge height 100.00 feet. Lake is replenished by Sounding Creek and drained naturally by Eyehill Creek. It is reported to have gone completely dry at least once during the period 1930 to 1940. The following gauge heights were obtained in 1958: 16 May, 94.63 feet; 3 November, 93.15 feet.

MACKAY CREEK AT WALSH - STATION No. 5AH₂

Location: Lat. 49° 57', long. 110° 03', in NW. 1/4 sec. 26, tp. 11, rge. 1, W. 4th Mer., Alberta, on Trans-Canada Highway bridge about five miles above confluence with Boxelder Creek. Drainage Area: 200 square miles. Gauge: Wire-weight. Measurement of Discharge: From bridge or by wading. Period of Record: Mainly March to October, 1911 to 1919, 1936 and 1956 to date; miscellaneous measurements in 1909, 1910 and 1931. Extremes Recorded: Daily - Maximum, 11 June 1916, 1,447 cfs, Minimum, Nil at various times; Instantaneous Maximum - 2 a.m., 12 June 1916, 1,836 cfs (slope-area measurement). Remarks: Records good during open-water period and fair during ice period. Records were collected about two miles downstream from present site during seasons 1951 to 1955 and published under title "near Walsh". Discharge is affected by several minor diversions above this station.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	0.2b	114	0.8	Nil	Nil	Nil	Nil	Nil	-	-
2.....	-	-	0.2	99	1.0	"	"	"	"	"	-	-
3.....	-	-	0.2	78	1.0	"	"	"	"	"	-	-
4.....	-	-	0.2	81	0.9	"	"	"	"	"	-	-
5.....	-	-	0.2	98	0.8	"	"	"	"	"	-	-
6.....	-	-	0.2	65b	0.7	"	"	"	"	"	-	-
7.....	-	-	0.2	33.5	0.7	"	"	"	"	"	-	-
8.....	-	-	0.2	29.8	0.6	"	"	"	"	"	-	-
9.....	-	-	0.2	26.8	0.6	"	"	"	"	"	-	-
10.....	-	-	0.2	26.2	0.5	"	"	"	"	"	-	-
11.....	-	-	0.2	22.2	0.5	"	"	"	"	"	-	-
12.....	-	-	0.3	17.2	2.0	"	"	"	"	"	-	-
13.....	-	-	0.3	14.0e	1.9	"	"	"	"	"	-	-
14.....	-	-	0.3	10.7	1.1	"	"	"	"	"	-	-
15.....	-	-	0.3	13.1	0.7	"	"	"	"	"	-	-
16.....	-	-	0.3	12.0	0.6	"	"	"	"	"	-	-
17.....	-	-	0.5	8.3	0.5	"	"	"	"	"	-	-
18.....	-	-	0.3	6.6	0.7	"	"	"	"	"	-	-
19.....	-	-	0.4	4.6	0.6	"	"	"	"	"	-	-
20.....	-	-	0.5	4.0	0.3	"	"	"	"	"	-	-
21.....	-	-	0.6	3.1	0.1	"	"	"	"	"	-	-
22.....	-	-	0.8	2.3	0.0	"	"	"	"	"	-	-
23.....	-	-	1	1.9	0.0	"	"	"	"	"	-	-
24.....	-	-	2	1.6	0.0	"	"	"	"	"	-	-
25.....	-	-	22	1.2	Nil	"	"	"	"	"	-	-
26.....	-	-	46	1.1	"	"	"	"	"	"	-	-
27.....	-	-	46	2.9	"	"	"	"	"	"	-	-
28.....	-	-	139	2.0	"	"	"	"	"	"	-	-
29.....	-	-	206	0.8	"	"	"	"	"	"	-	-
30.....	-	-	155	0.7	"	"	"	"	"	"	-	-
31.....	-	-	177	-	"	-	"	"	-	"	-	-
Mean	-	-	25.8	26.1	0.54	Nil	Nil	Nil	Nil	Nil	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	1,590	1,550	33	Nil	Nil	Nil	Nil	Nil	-	-

The Period.....Discharge: Daily - Maximum 29 March, 206
(245 days) - Minimum at various times, Nil

Mean 6.53

Runoff: Acre-feet 3,170

b - Ice conditions 1 March to 6 April.

e - Estimated.

BOXELDER CREEK NEAR WALSH - STATION No. 5AH₁

Location: Lat. 49° 58', long. 109° 59', in NE. 1/4 sec. 35, tp. 11, rge. 30, W. 3rd Mer., Saskatchewan, three miles above confluence with Mackay Creek and three miles east of Walsh, Alberta. Drainage Area: 124 square miles. Gauge: Wire-weight. Measurement of Discharge: From bridge or by wading. Period of Record: Mainly March to October, 1911 to 1919 and 1950 to date; miscellaneous measurements in 1909 and 1910. Prior to 1950, records were obtained one-half mile downstream. Records for 1912 to 1919 were published under the title "at Young's Ranch". Extremes Recorded: Daily - Maximum, 10 April 1955, 1,680 cfs, Minimum, Nil at various times; Instantaneous Maximum - 2 a.m., 10 April 1955, 3,560 cfs (from slope-area determination). Revisions: 1950, W.R.P. 117. Revised data for 1911 and 1914 to 1918 can be obtained upon application to the District Engineer at Calgary, for address see page 8. Remarks: Records fair. Discharge is affected by a few minor diversions to private irrigation schemes above this station.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	Nil	66	Nil	Nil	Nil	Nil	Nil	Nil	-	-
2.....	-	-	"	56e	"	"	"	"	"	"	-	-
3.....	-	-	"	45.1	"	"	"	"	"	"	-	-
4.....	-	-	"	37.5	"	"	"	"	"	"	-	-
5.....	-	-	"	41.0	"	"	"	"	"	"	-	-
6.....	-	-	"	29.3	"	"	"	"	"	"	-	-
7.....	-	-	"	18.9	"	"	"	"	"	"	-	-
8.....	-	-	"	10.8	"	"	"	"	"	"	-	-
9.....	-	-	"	8.7	"	"	"	"	"	"	-	-
10.....	-	-	"	8.3	"	"	"	"	"	"	-	-
11.....	-	-	"	5.4	"	"	"	"	"	"	-	-
12.....	-	-	"	8.3e	"	"	"	"	"	"	-	-
13.....	-	-	"	11.2	"	"	"	"	"	"	-	-
14.....	-	-	"	10.3	"	"	"	"	"	"	-	-
15.....	-	-	"	10.3	"	"	"	"	"	"	-	-
16.....	-	-	"	6.4	"	"	"	"	"	"	-	-
17.....	-	-	"	4.2	"	"	"	"	"	"	-	-
18.....	-	-	"	3.0e	"	"	"	"	"	"	-	-
19.....	-	-	"	1.7	"	"	"	"	"	"	-	-
20.....	-	-	"	1.5	"	"	"	"	"	"	-	-
21.....	-	-	"	1.1	"	"	"	"	"	"	-	-
22.....	-	-	"	1.0	"	"	"	"	"	"	-	-
23.....	-	-	"	0.7	"	"	"	"	"	"	-	-
24.....	-	-	3.8	0.4e	"	"	"	"	"	"	-	-
25.....	-	-	7.9	Nil	"	"	"	"	"	"	-	-
26.....	-	-	26.8	"	"	"	"	"	"	"	-	-
27.....	-	-	32.0	"	"	"	"	"	"	"	-	-
28.....	-	-	31.2	"	"	"	"	"	"	"	-	-
29.....	-	-	41.7	"	"	"	"	"	"	"	-	-
30.....	-	-	58	"	"	"	"	"	"	"	-	-
31.....	-	-	77	-	"	-	"	"	-	"	-	-
Mean	-	-	8.98	12.9	Nil	Nil	Nil	Nil	Nil	Nil	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	552	768	Nil	Nil	Nil	Nil	Nil	Nil	-	-

The Period..... Discharge: Daily - Maximum 31 March, 77
 (245 days) - Minimum at various times, Nil
 Mean 2.72
 Runoff: Acre-feet 1,320

e - Estimated.

MANYBERRIES CREEK AT BRODIN'S FARM - STATION No. 5AF₁₀

Location: Lat. 49° 21' 30", long. 110° 43' 30", in NE. 1/4 sec. 3, tp. 5, rge. 6, W. 4th Mer., Alberta, about five miles south of Manyberries, one mile below confluence with South Branch and thirteen miles by creek upstream from Pakowki Lake. Drainage Area: 137 square miles. Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: Part-year records 1911 to 1917, 1919 to 1931 and 1935 to date; miscellaneous measurements in 1918. The recorder was established in July 1956 to replace the former staff gauge. Records published under the titles "at Hooper and Huckvale's Ranch" from 1911 to 1916 and "at Yeast's Ranch" from 1917 to 1919. Extremes Recorded: Daily - Maximum, 29 March 1943, 1,910 cfs, Minimum, Nil at various times. Revisions: May 1941 and May 1945 mean discharges have been corrected to 0.0 cfs. Remarks: Records good during open-water period and fair during ice period.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	2b	703x	2.8	0.2	Nil	Nil	Nil	Nil	-	-
2.....	-	-	2	733x	2.8	0.2	"	"	"	"	-	-
3.....	-	-	2	466x	2.6	0.1	"	"	"	"	-	-
4.....	-	-	2	869x	2.1	0.1	"	"	"	"	-	-
5.....	-	-	2	523	2.0e	0.1	"	"	"	"	-	-
6.....	-	-	2	151	1.8	0.1	"	"	"	"	-	-
7.....	-	-	2	110x	2.0	0.1	"	"	"	"	-	-
8.....	-	-	2	138	2.0	0.0	"	"	"	"	-	-
9.....	-	-	2	82	1.8	0.0	"	"	"	"	-	-
10.....	-	-	2	68x	1.6	0.0	"	"	"	"	-	-
11.....	-	-	2x	65x	1.5	0.0	"	"	"	"	-	-
12.....	-	-	2	54x	2.0	0.0	"	"	"	"	-	-
13.....	-	-	2	64	20.3	0.0	"	"	"	"	-	-
14.....	-	-	1	66	8.2	0.0	"	"	"	"	-	-
15.....	-	-	1	38.3	4.5	0.0	"	"	"	"	-	-
16.....	-	-	1	27.9	3.0	0.0	"	"	"	"	-	-
17.....	-	-	1	21.8	2.2	0.0	"	"	"	"	-	-
18.....	-	-	1	14.5	1.6	0.0	"	"	"	"	-	-
19.....	-	-	1	11.1	1.2	0.0	"	"	"	"	-	-
20.....	-	-	1	9.4	0.9	0.1	"	"	"	"	-	-
21.....	-	-	1	8.4	0.8	0.0	"	"	"	"	-	-
22.....	-	-	1	7.4e	0.6	0.0	"	"	"	"	-	-
23.....	-	-	1	6.3	0.6	0.0	"	"	"	"	-	-
24.....	-	-	1	5.3	0.4	0.0	"	"	"	"	-	-
25.....	-	-	1x	4.7e	0.2	0.0	"	"	"	"	-	-
26.....	-	-	1	4.1	0.2	Nil	"	"	"	"	-	-
27.....	-	-	1 _b	3.7	0.1	"	"	"	"	"	-	-
28.....	-	-	25x	3.2	0.1	"	"	"	"	"	-	-
29.....	-	-	103x	2.9	0.0	"	"	"	"	"	-	-
30.....	-	-	284x	2.8	0.0	"	"	"	"	"	-	-
31.....	-	-	572x	-	0.0	-	"	"	-	"	-	-
Mean	-	-	33.0	142	2.25	0.03	Nil	Nil	Nil	Nil	-	-
Per sq. mi.	-	-	0.241	1.036	0.016	0.002	Nil	Nil	Nil	Nil	-	-
Acre-feet	-	-	2,030	8,460	139	2.0	Nil	Nil	Nil	Nil	-	-

The Period..... Discharge: Daily - Maximum 4 April, 869
 (245 days) - Minimum at various times, Nil
 Mean 21.9; Per Square mile 0.160
 Runoff: Acre-feet 10,630; Depth in inches on drainage area 1.455

b - Ice conditions 1 to 28 March.

e - Estimated.

x - Staff gauge readings.

Gauge heights from graph of observed readings and partial recorder chart 29 March to 4 April, 7, and 10 to 12 April.

BIG QUILL LAKE NEAR KANDAHAR - STATION No. 5MA₁₀

Location: Lat. 51° 46' 50", long. 104° 19' 10", in NW. 1/4 sec. 26, tp. 32, rge. 17, W. 2nd Mer., Saskatchewan, about two miles northeast of Kandahar, five miles west of Wynyard and five miles southeast of Big Quill Lake near Wynyard, Station No. 5AM₅. Gauge: Measuring point. Period of Record: Occasional observations 1956 to date. Extremes Recorded: Daily - Maximum, 15 May 1957, 85.22 feet, Minimum, 3 November 1958, 83.35 feet. Remarks: Gauge heights are obtained by reference to bench mark, described as round bar at the northwest corner of sec. 26, tp. 32, gauge height 100.00 feet. Datum is 1.6 feet lower than datum for station Little Quill Lake near Clair, 5MA₂. There is no tie to data for any other former stations on Quill Lakes. The following gauge heights were obtained in 1958: 25 April, 84.89 feet; 3 November, 83.35 feet.

LITTLE QUILL LAKE NEAR CLAIR - STATION No. 5MA₂

Location: Lat. 51° 57' 30", long. 104° 09' 30", in SE. 1/4 sec. 35, tp. 34, rge. 16, W. 2nd Mer., Saskatchewan, near mouth of Quill Creek and about five miles southwest of Clair. Gauge: Measuring point. Period of Record: Occasional observations 1919 to 1922, 1954 and 1956 to date. Extremes Recorded: Daily - Maximum, 29 June 1922, 95.96 feet, Minimum, 10 November 1954, 89.98 feet. Remarks: All readings referred to standard iron bench mark near gauge, gauge height 98.00 feet and there is no tie to data for other stations on Quill Lakes. The following gauge heights were obtained in 1958: 25 April, 93.00 feet; 3 November, 91.40 feet.

SAGE CREEK AT "Q" RANCH NEAR WILD HORSE - STATION No. 11AA₂₆

(International Gauging Station)

Location: Lat. 49° 07' 30", long. 110° 13' 20", in SW. 1/4 sec. 9, tp. 2, rge. 2, W. 4th Mer., Alberta, about ten miles by creek above the International Boundary. Drainage Area: 164 square miles. Gauge: Recording. Measurement of Discharge: From cableway or by wading. Period of Record: March to October, 1935 to 1944 and 1946 to date. Extremes Recorded: Daily - Maximum, 29 March 1943, 2,710 cfs (estimated), Minimum, Nil at various times; Instantaneous Maximum - 11 April 1937, 3,500 cfs. Revisions: Data to 1950 inclusive were reviewed in co-operation with the United States Geological Survey and revised data are available upon application to the District Engineer at Calgary, for address see page 8. The August 1951 mean discharge has been corrected to 21.1 cfs. Remarks: Records excellent during open-water period and fair during ice period. This station is maintained by Canada under agreement with the United States. Prior to 1952, records were obtained by Canada only.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	Nil b	564	1.0	0.0	Nil	Nil	Nil	Nil	-	-
2.....	-	-	"	802	0.8	0.0	"	"	"	"	-	-
3.....	-	-	"	836	0.6	0.0	"	"	"	"	-	-
4.....	-	-	"	1,400	0.5	0.0	"	"	"	"	-	-
5.....	-	-	"	1,540b	0.4	0.0	"	"	"	"	-	-
6.....	-	-	"	638	0.3	0.0	"	"	"	"	-	-
7.....	-	-	"	320	0.3	0.0	"	"	"	"	-	-
8.....	-	-	"	297	0.2	0.0	"	"	"	"	-	-
9.....	-	-	10	199	0.2	0.0	"	"	"	"	-	-
10.....	-	-	5	123	0.1	0.0	"	"	"	"	-	-
11.....	-	-	0	115	0.1	0.0	"	"	"	"	-	-
12.....	-	-	Nil	72	0.1	0.0	"	"	"	"	-	-
13.....	-	-	"	50	0.1	0.0	"	"	"	"	-	-
14.....	-	-	"	46.0	0.1	0.0	"	"	"	"	-	-
15.....	-	-	"	45.6	0.0	0.0	"	"	"	"	-	-
16.....	-	-	"	29.3	0.0	0.0	"	"	"	"	-	-
17.....	-	-	"	20.2	0.0	0.0	"	"	"	"	-	-
18.....	-	-	"	18.8	0.0	0.0	"	"	"	"	-	-
19.....	-	-	"	11.6	0.0	0.0	"	"	"	"	-	-
20.....	-	-	"	8.6	0.0	0.0	"	"	"	"	-	-
21.....	-	-	"	6.8	0.0	0.0	"	"	"	"	-	-
22.....	-	-	"	5.0	0.0	0.0	"	"	"	"	-	-
23.....	-	-	"	4.3	0.0	0.0	"	"	"	"	-	-
24.....	-	-	"	3.8	0.0	Nil	"	"	"	"	-	-
25.....	-	-	"	2.9	0.0	"	"	"	"	"	-	-
26.....	-	-	1	2.2	0.0	"	"	"	"	"	-	-
27.....	-	-	4	2.0	0.0	"	"	"	"	"	-	-
28.....	-	-	11	1.5	0.0	"	"	"	"	"	-	-
29.....	-	-	56	1.3	0.0	"	"	"	"	"	-	-
30.....	-	-	183	1.1	0.0	"	"	"	"	"	-	-
31.....	-	-	385	-	0.0	-	"	"	-	"	-	-
Mean	-	-	21.1	239	0.15	0.00	Nil	Nil	Nil	Nil	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	1,300	14,220	9.5	0.0	Nil	Nil	Nil	Nil	-	-

The Period..... Discharge: Daily - Maximum 5 April, 1,540
 (245 days) - Minimum at various times, Nil
 Instantaneous Maximum 5 a.m., 5 April, 1,730
 Mean 31.9
 Runoff: Acre-feet 15,530

b - Ice conditions 1 March to 5 April.

(International Gauging Station)

Location: Lat. 49° 00' 10", long. 110° 11' 30", in SE. 1/4 sec. 3, tp. 1, rge. 2, W. 4th Mer., Alberta, about one-quarter of a mile upstream from International Boundary and about one mile east of Wild Horse Customs Post. Drainage Area: 188 square miles. Gauge: Recording. Measurement of Discharge: From footbridge or by wading. Period of Record: March to October, 1946 to date. Records for 1947 were collected at Flett's Lower Dam immediately above present site and all other records prior to 1951 at a site in NW. 1/4 sec. 5, tp. 37N, rge. 12E, Montana, about one hundred yards downstream from the International Boundary. Extremes Recorded: Daily - Maximum, 3 and 6 September 1951, 52 cfs, Minimum, Nil at various times. Revisions: Data to 1950 inclusive were reviewed in co-operation with the United States Geological Survey and no revisions were found necessary. Remarks: Records poor. This station is maintained by the United States under agreement with Canada. Prior to 1951, records were obtained by Canada only. Discharge affected by diversion for irrigation purposes upstream. Creek overflows at high stages and overflow by-passes this station.

Daily Discharge in Cubic Feet per Second for Calendar Year 1958

Day	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1.....	-	-	Nil	38	1.0	1.5	Nil	Nil	Nil	Nil	-	-
2.....	-	-	"	38	0.9	1.5	"	"	"	"	-	-
3.....	-	-	"	37	0.8	1.0	"	"	"	"	-	-
4.....	-	-	"	36	0.7	1.0	"	"	"	"	-	-
5.....	-	-	"	33	0.5	0.9	"	"	"	"	-	-
6.....	-	-	"	30	0.4e	0.8	"	"	"	"	-	-
7.....	-	-	"	25	0.4e	0.6	"	"	"	"	-	-
8.....	-	-	"	20	0.3e	0.6	"	"	"	"	-	-
9.....	-	-	"	20	0.2e	0.4	"	"	"	"	-	-
10.....	-	-	"	23	0.2e	0.4	"	"	"	"	-	-
11.....	-	-	"	25	0.1e	0.2	"	"	"	"	-	-
12.....	-	-	"	26	0.1e	0.2	"	"	"	"	-	-
13.....	-	-	"	29	0.0	0.2	"	"	"	"	-	-
14.....	-	-	"	30	0.0	0.2	"	"	"	"	-	-
15.....	-	-	"	30	0.0	0.1e	"	"	"	"	-	-
16.....	-	-	"	35	0.0	0.1e	"	"	"	"	-	-
17.....	-	-	"	34	0.0	0.1e	"	"	"	"	-	-
18.....	-	-	"	33	0.0	0.0e	"	"	"	"	-	-
19.....	-	-	"	26	0.0	0.0e	"	"	"	"	-	-
20.....	-	-	"	22	0.0	0.0e	"	"	"	"	-	-
21.....	-	-	"	15	0.0	Nil	"	"	"	"	-	-
22.....	-	-	"	11	0.0	"	"	"	"	"	-	-
23.....	-	-	"	7.5	0.0	"	"	"	"	"	-	-
24.....	-	-	"	4.0	0.0	"	"	"	"	"	-	-
25.....	-	-	"	3.0	0.0	"	"	"	"	"	-	-
26.....	-	-	"	2.5	0.0	"	"	"	"	"	-	-
27.....	-	-	"	2.0	0.0	"	"	"	"	"	-	-
28.....	-	-	"	1.5	0.0	"	"	"	"	"	-	-
29.....	-	-	"	1.5	0.0	"	"	"	"	"	-	-
30.....	-	-	6.5	1.0	0.0	"	"	"	"	"	-	-
31.....	-	-	33	-	0.2	-	"	"	-	"	-	-
Mean	-	-	1.27	21.3	0.19	0.33	Nil	Nil	Nil	Nil	-	-
Per sq. mi.	-	-	-	-	-	-	-	-	-	-	-	-
Acre-feet	-	-	78	1,270	12	19	Nil	Nil	Nil	Nil	-	-

The Period..... Discharge: Daily - Maximum 1 and 2 April, 38
(245 days) - Minimum at various times, Nil

Mean 2.83

Runoff: Acre-feet 1,380

e - Estimated.

Stage-discharge relationship affected by backwater from vegetation, debris and turn-out boards.

METEOROLOGIC DATA

MONTHLY RECORDS OF METEOROLOGICAL STATION AT KEEWATIN, ONTARIO

FOR WATER YEAR 1957-58

	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
Mean Monthly Temperature of Lake	52.6	39.3a	-	-	-	-	-	-	-	65.3	67.4	60.6
Mean Monthly Temperature of Tank	51.5	-	-	-	-	-	-	-	-	64.9	66.6	59.9
Mean Monthly Temperature of Day	45.5	23.6	10.6	7.7	5.3	26.7	40.6	50.0	57.7	65.1	63.3	54.9
Mean Monthly Barometric Pressure	30.01	29.82	29.79	29.91	29.94	30.11	29.91	29.91	29.79	29.80	29.81	29.79
Mean Monthly Humidity Per Cent.	90.7	-	-	-	-	-	-	-	-	92.9	91.8	93.0
Total Monthly Evaporation in Inches	2.06	-	-	-	-	-	-	-	-	1.75	3.01	2.91
Total Monthly Precipitation in Inches	1.25	1.40	0.59	0.94	0.42	0.29	1.23	0.95	3.19	6.35	1.82	1.78

a - 1 to 28 November.

MONTHLY RECORDS OF METEOROLOGICAL STATION AT GREAT FALLS, MANITOBA

FOR WATER YEAR 1957-58

	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.
Mean Monthly Temperature	44.2	23.0	10.2	7.3	3.1	26.0	41.6	50.2	56.8	64.6	62.0	53.4
Total Monthly Evaporation in Inches	0.66a	-	-	-	-	-	-	1.59b	4.59	4.66	5.35	3.50
Total Monthly Precipitation in Inches	0.46	0.34	0.44	0.57	0.20	0.26	1.25	0.56	1.07	4.52	1.98	2.12

a - 1 to 27 October.

b - 14 to 31 May.

ESTEVAN EVAPORATION STATION

Location: Lat. 49° 04', long. 103° 00', in sec. 28, tp. 1, rge. 8, W. 2nd Mer., Saskatchewan, at Estevan Airport. Data: Evaporation records from four-foot circular land pan set in ground. Precipitation records from standard meteorological station at same location. Period of Record: May to October, 1956 to date.

Daily Evaporation and Precipitation in Inches for Year 1958

Day	April		May		June		July		August		September		October	
	Evap- oration	Precip- itation	Evap- oration	Precip- itation	Evap- oration	Precip- itation	Evap- oration	Precip- itation	Evap- oration	Precip- itation	Evap- oration	Precip- itation	Evap- oration	Precip- itation
1.....	0.00e	-	0.05	0.05	0.06	0.18	0.12	-	0.50	-	0.31	-	0.06	-
2.....	0.00e	-	0.06	-	0.06	-	0.25	-	0.06	-	0.25	-	0.12	-
3.....	0.00	-	0.09	0.09	0.12	-	0.00	0.35	0.12	-	0.25	-	0.06	-
4.....	0.00	-	0.06	0.06	0.08	0.02	0.20	0.14	0.10	0.04	0.10	0.10	0.12	-
5.....	0.06	-	0.12	-	0.19	-	0.10	0.07	0.12	-	0.12	-	0.12	-
6.....	0.06	-	0.12	-	0.31	-	0.09	-	0.19	-	0.12	-	0.16	0.03
7.....	0.06	-	0.12	-	0.12	-	0.19	-	0.25	-	0.19	-	0.12	-
8.....	0.06	-	0.12	-	0.19	-	0.12	-	0.25	-	0.19	-	0.12	-
9.....	0.06	-	0.19	-	0.36	0.30	0.12	-	0.38	-	0.19	-	0.04	0.04
10.....	0.00	-	0.06	-	0.19	-	0.06	-	0.12	-	0.12	-	0.00	-
11.....	0.00	-	0.25	-	0.31	-	0.19	-	0.31	-	0.12	-	0.06	-
12.....	0.06	-	0.44	-	0.12	-	0.25	-	0.19	-	0.12	-	0.12	-
13.....	0.19	-	0.25	-	0.19	-	0.36	0.11	0.19	-	0.31	0.06	0.12	-
14.....	0.19	-	0.44	-	0.19	-	0.00	0.09	0.19	-	0.16	0.04	0.19	-
15.....	0.19	-	0.25	-	0.13	0.57	0.19	-	0.25	-	0.12	-	0.12	-
16.....	0.12	-	0.25	-	0.06	0.19	0.12	-	0.25	-	0.25	-	0.12	-
17.....	0.07	0.01	0.19	-	0.12	-	0.25	-	0.19	-	0.06	-	0.12	-
18.....	0.26	0.20	0.12	-	0.12	-	0.12	-	0.38	-	0.25	-	0.19	-
19.....	0.25	0.13	0.19	-	0.25	-	0.25	-	0.15	0.09	0.19	-	0.12	-
20.....	0.00e	-	0.25	-	0.25	-	0.25	-	0.08	0.02	0.31	-	0.38	1.26
21.....	0.06e	-	0.25	-	0.02	0.27	0.12	-	0.17	0.11	0.19	-	0.07	0.26
22.....	0.06	-	0.19	-	0.19	-	0.19	-	0.06	-	0.12	-	0.13	0.13
23.....	0.06	-	0.19	-	0.16	0.04	0.15	0.03	0.19	-	0.25	-	0.06	-
24.....	0.19	-	0.19	-	0.25	-	0.25	-	0.06	-	0.12	-	0.06	-
25.....	0.12	-	0.44	0.25	0.19	-	0.19	-	0.12	-	0.12	-	0.06	-
26.....	0.12	-	0.19	-	0.12	-	0.09	0.09	0.12	-	0.12	-	0.00	-
27.....	0.06	-	0.19	-	0.25	-	0.14	0.01	0.19	-	0.19	-	0.06	-
28.....	0.12	-	0.25	-	0.31	-	0.25	-	0.18	0.06	0.09	0.09	0.06	-
29.....	0.19	0.02	0.20	0.01	0.19	-	0.19	-	0.12	-	0.04	0.04	0.12	-
30.....	0.12	-	0.25	-	0.22	0.03	0.19	-	0.06	-	0.14	0.01	0.12	-
31.....	-	-	0.19	-	-	-	0.62	-	0.12	-	-	-	0.00	-
Total	2.73	0.36	6.15	0.46	5.34	1.60	5.61	0.89	5.66	0.32	5.11	0.34	3.20	1.72

e - Estimated.

THE PAS EVAPORATION STATION

497

Location: Lat. 53° 43', long. 101° 30', in sec. 1, tp. 55, rge. 28, W. 1st Mer., Manitoba. Data: Evaporation records from four-foot circular land pan set in ground. Precipitation records at this station are obtained by means of a recording rain gauge. Period of Record: June to October, 1957 to date. Remarks: Records supplied by P.F.R.A. (Winnipeg Office).

Daily Evaporation and Precipitation in Inches for Year 1958

Day	April		May		June		July		August		September		October	
	Evap- oration	Precip- itation	Evap- oration	Precip- itation	Evap- oration	Precip- itation	Evap- oration	Precip- itation	Evap- oration	Precip- itation	Evap- oration	Precip- itation	Evap- oration	Precip- itation
1.....	-	-	-	-	0.13	0.10	0.11	0.26	0.18	0.01	0.00	0.09	0.01	0.01
2.....	-	-	-	-	0.06	0.26	0.10	-	0.25	-	0.00	0.27	0.00	0.33
3.....	-	-	-	-	0.10	-	0.12	0.09	0.26	0.22	0.09	-	0.00	0.25
4.....	-	-	-	-	0.20	-	0.09	0.40	0.21	0.04	0.07	-	0.06	-
5.....	-	-	-	-	0.11	-	0.00	0.09	0.09	0.05	0.06	0.01	0.03	-
6.....	-	-	-	-	0.14	0.08	0.18	-	0.09	-	0.12	0.01	0.06	-
7.....	-	-	-	-	0.30	-	0.11	-	0.07	-	0.08	-	0.03	-
8.....	-	-	-	-	0.14	-	0.20	-	0.26	-	0.13	-	0.00	0.14
9.....	-	-	-	-	0.12	0.02	0.13	0.05	0.11	-	0.10	-	0.00	1.35
10.....	-	-	-	-	0.12	0.07	0.15	-	0.15	0.06	0.02	0.26	0.03	0.07
11.....	-	-	-	-	0.07	0.04	0.25	-	0.23	0.01	0.04	-	0.00	-
12.....	-	-	-	-	0.13	-	0.11	0.27	0.15	-	0.03	0.15	0.06	-
13.....	-	-	-	-	0.11	-	0.12	0.12	0.26	0.29	0.00	0.25	0.00	-
14.....	-	-	-	-	0.14	-	0.15	-	0.20	-	0.00	0.39	0.03	-
15.....	-	-	-	-	0.14	-	0.20	-	0.17	-	0.03	0.01	0.03	-
16.....	-	-	-	-	0.18	-	0.03	0.10	0.20	-	0.05	-	0.08	-
17.....	-	-	-	-	0.13	-	0.15	0.10	0.21	-	0.05	-	0.03	-
18.....	-	-	-	-	0.24	-	0.15	-	0.26	-	0.03	-	0.05	-
19.....	-	-	-	-	0.18	-	0.16	-	0.19	-	0.06	0.24	0.13	-
20.....	-	-	-	-	0.17	0.02	0.14	-	0.18	-	0.00	0.38	0.03	-
21.....	-	-	0.12	-	0.26	-	0.17	-	0.10	-	0.00	-	0.01	-
22.....	-	-	0.18	-	0.29	-	0.14	0.17	0.07	0.35	0.05	0.01	0.00	-
23.....	-	-	0.24	-	0.14	0.14	0.17	-	0.08	-	0.08	0.08	0.04	0.01
24.....	-	-	0.23	0.01	0.11	-	0.11	0.25	0.04	0.04	0.00	0.04	0.02	-
25.....	-	-	0.22	-	0.18	-	0.17	0.07	0.06	0.11	0.01	-	0.05	-
26.....	-	-	0.18	-	0.21	-	0.10	-	0.03	-	0.08	-	0.00	-
27.....	-	-	0.16	-	0.28	-	0.10	0.10	0.07	0.39	0.04	-	0.03	-
28.....	-	-	0.17	-	0.11	0.18	0.10	-	0.05	-	0.05	0.01	0.03	-
29.....	-	-	0.11	-	0.19	-	0.17	0.02	0.08	0.01	0.15	0.07	0.04	-
30.....	-	-	0.09	-	0.08	-	0.22	-	0.09	-	0.00	-	0.04	-
31.....	-	-	0.11	0.04	-	-	0.19	-	0.01	0.19	-	-	0.04	-
Total.....	-	-	1.81	0.05	4.76	0.91	4.29	2.09	4.40	1.77	1.42	2.27	0.96	2.16

Ice on water 1, 2, 11, 12, 14, 28 and 29 October.

CYPRESS LAKE EVAPORATION STATION

Location: Lat. 49° 27', long. 109° 28', in sec. 5, tp. 6, rge. 26, W. 3rd Mer., Saskatchewan, at P. V. Hegland's farm on south side of Cypress Lake and about nine miles northwest of Vidora. Data: Evaporation records from four-foot circular pan sunk in ground. Precipitation records are obtained at this station by means of standard equipment. Period of Record: April to October, 1939 to date.

Daily Evaporation and Precipitation in Inches for Year 1958

Day	April		May		June		July		August		September		October	
	Evap- oration	Precip- itation	Evap- oration	Precip- itation	Evap- oration	Precip- itation	Evap- oration	Precip- itation	Evap- oration	Precip- itation	Evap- oration	Precip- itation	Evap- oration	Precip- itation
1.....	0.00e	-	0.13	0.27	0.14	0.37	0.11	-	0.25	-	0.24	-	0.06	-
2.....	0.00	-	0.00	-	0.05	-	0.10	-	0.23	-	0.07	-	0.05	-
3.....	0.02	-	0.06	-	0.06	-	0.08	-	0.24	-	0.08	-	0.05	-
4.....	0.00	-	0.06	-	0.06	-	0.07	0.26	0.19	-	0.10	-	0.03	-
5.....	0.09	0.16	0.08	-	0.09	-	0.00	-	0.20	-	0.08	-	0.09	-
6.....	0.00	-	0.09	-	0.11	-	0.06	-	0.18	-	0.08	-	0.08	-
7.....	0.00	-	0.10	-	0.09	-	0.07	-	0.24	-	0.07	-	0.09	-
8.....	0.02	-	0.12	-	0.11	-	0.04	0.04	0.25	-	0.09	-	0.06	-
9.....	0.05	-	0.13	-	0.15	0.41	0.08	-	0.18	-	0.16	-	0.12	0.12
10.....	0.00	-	0.14	-	0.04	-	0.10	-	0.19	-	0.09	-	0.00	-
11.....	0.04	0.04	0.16	-	0.06	-	0.19	0.82	0.17	-	0.14	-	0.00	-
12.....	0.00	-	0.08	-	0.08	-	0.04	-	0.20	-	0.09	-	0.04	-
13.....	0.02	-	0.10	0.07	0.11	-	0.04	0.22	0.27	-	0.16	-	0.06	-
14.....	0.14	-	0.14	-	0.12	-	0.07	-	0.16	-	0.07	-	0.07	-
15.....	0.11	-	0.16	-	0.10	0.23	0.05	-	0.17	-	0.09	-	0.04	-
16.....	0.07	0.07	0.13	-	0.06	-	0.08	-	0.16	-	0.07	-	0.04	-
17.....	0.00	-	0.15	-	0.10	-	0.08	-	0.25	-	0.13	-	0.05	-
18.....	0.07	-	0.13	-	0.11	-	0.12	-	0.22	-	0.08	-	0.07	-
19.....	0.09	-	0.15	-	0.06	0.11	0.15	-	0.12	0.03	0.16	-	0.05	-
20.....	0.05	-	0.17	-	0.08	-	0.10	-	0.11	-	0.05	0.03	0.13	0.36
21.....	0.06	0.04	0.18	-	0.11	-	0.13	-	0.09	-	0.07	-	0.01	-
22.....	0.08	0.19	0.20	-	0.08	-	0.11	-	0.13	-	0.03	-	0.05	-
23.....	0.04	-	0.13	-	0.04	0.04	0.05	0.18	0.11	-	0.05	-	0.06	-
24.....	0.07	-	0.21	-	0.11	-	0.14	-	0.10	-	0.06	-	0.05	-
25.....	0.04	-	0.17	-	0.18	-	0.11	-	0.16	-	0.07	-	0.06	-
26.....	0.03	-	0.16	-	0.16	-	0.08	0.03	0.29	-	0.05	-	0.04	-
27.....	0.09	-	0.16	-	0.17	-	0.14	-	0.08	-	0.05	-	0.04	-
28.....	0.05	-	0.18	-	0.12	0.34	0.17	-	0.10	0.16	0.04	-	0.05	-
29.....	0.11	-	0.15	-	0.06	-	0.11	-	0.02	-	0.04	-	0.04	-
30.....	0.04	0.04	0.14	-	0.10	-	0.16	-	0.11	0.46	0.06	0.04	0.04	-
31.....	-	-	0.07	-	-	-	0.17	-	0.06	-	-	-	0.04	-
Total.....	1.38	0.54	4.03	0.34	2.91	1.50	3.00	1.55	5.23	0.65	2.62	0.07	1.66	0.48

e - Estimated.

MANYBERRIES EVAPORATION STATION

499

Location: Lat. 49° 07' 20", long. 110° 28' 10", in SW. 1/4 sec. 15, tp. 2, rge. 4, W. 4th Mer., Alberta, at Dominion Government Experimental Range Station near Manyberries. Data: Evaporation records from four-foot circular land pan set in ground. Precipitation records are also obtained at this station by means of standard equipment. Period of Record: May to September, 1952 to 1955 and May to October, 1956 to date.

Daily Evaporation and Precipitation in Inches for Year 1958

Day	April		May		June		July		August		September		October	
	Evap- oration	Precip- itation	Evap- oration	Precip- itation	Evap- oration	Precip- itation	Evap- oration	Precip- itation	Evap- oration	Precip- itation	Evap- oration	Precip- itation	Evap- oration	Precip- itation
1.....	-	-	0.09	-	0.07	0.09	0.16	0.09	0.45	-	0.39	-	0.08	-
2.....	-	-	0.20	-	0.11	-	0.16	0.01	0.28	-	0.22	-	0.20	-
3.....	-	-	0.20	-	0.07	0.26	0.08	-	0.54	-	0.20	-	0.27	-
4.....	-	-	0.23	-	0.06	0.06	0.20	-	0.43	-	0.20	-	0.18	-
5.....	-	-	0.23	-	0.19	-	0.28	-	0.31	-	0.22	-	0.18	-
6.....	-	-	0.15	-	0.18	-	0.10	-	0.30	-	0.19	-	0.11	-
7.....	-	-	0.22	-	0.20	-	0.08	0.05	0.44	-	0.29	-	0.24	-
8.....	-	-	0.30	-	0.48	0.38	0.11	0.11	0.35	-	0.41	-	0.08	0.05
9.....	-	-	0.27	-	0.19	0.19	0.19	-	0.34	-	0.23	-	0.00e	-
10.....	-	-	0.23	-	0.07	0.03	0.24	-	0.42	-	0.27	-	0.15	-
11.....	-	-	0.29	-	0.18	-	0.23	0.05	0.34	0.09	0.23	-	0.04	-
12.....	-	-	0.19	0.61	0.10	-	0.36	0.15	0.38	-	0.29	0.01	0.28	-
13.....	-	-	0.15	-	0.10	-	0.32	0.13	0.42	-	0.17	0.36	0.12	-
14.....	-	-	0.20	-	0.16	0.08	0.08	0.08	0.34	-	0.02	0.02	0.17	-
15.....	-	-	0.23	-	0.13	0.03	0.17	-	0.32	-	0.12	-	0.13	-
16.....	-	-	0.24	-	0.19	0.02	0.22	-	0.38	-	0.16	-	0.12	-
17.....	-	-	0.26	-	0.20	0.10	0.28	-	0.42	-	0.29	-	0.15	-
18.....	-	-	0.25	-	0.20	0.56	0.27	-	0.35	0.17	0.19	-	0.21	-
19.....	-	-	0.30	-	0.09	0.05	0.23	-	0.15	0.10	0.26	0.08	0.20	0.56
20.....	-	-	0.21	-	0.15	0.06	0.30	-	0.19	-	0.17	-	0.09	-
21.....	-	-	0.27	-	0.18	-	0.31	-	0.20	-	0.21	-	0.09	-
22.....	-	-	0.20	-	0.18	-	0.37	0.05	0.35	-	0.03	0.18	0.07	-
23.....	-	-	0.26	-	0.26	-	0.31	-	0.25	-	0.04	0.07	0.12	-
24.....	-	-	0.28	-	0.28	-	0.29	-	0.29	-	0.13	-	0.07	-
25.....	-	-	0.30	-	0.28	-	0.31	0.23	0.30	-	0.23	-	0.03	-
26.....	-	-	0.27	-	0.20	-	0.19	-	0.34	-	0.16	-	0.05	-
27.....	-	-	0.29	-	0.37	0.10	0.21	0.16	0.20	0.16	0.09	-	0.03	-
28.....	-	-	0.27	-	0.30	-	0.19	0.02	0.16	-	0.14	-	0.05e	-
29.....	-	-	0.37	-	0.19	-	0.24	-	0.10	0.01	0.13	-	0.05e	-
30.....	-	-	0.27	-	0.17	-	0.26	-	0.24	-	0.09	0.01	0.07e	-
31.....	-	-	0.32	0.82	-	-	0.42	-	0.27	-	-	-	0.08	-
Total.....	-	-	7.54	1.43	5.53	2.01	7.16	1.13	9.85	0.53	5.77	0.73	3.71	0.61

e - Estimated.

VAL MARIE EVAPORATION STATION

Location: Lat. 49° 14' 30", long. 107° 44', in NW. 1/4 sec. 29, tp. 3, rge. 13, W. 3rd Mer., Saskatchewan, at Canadian Pacific Railway depot at Val Marie. Data: Evaporation records from four-foot circular pan sunk in ground. Precipitation records from standard meteorological station at same location. Period of Record: Mainly April to October, 1937 to date.

Daily Evaporation and Precipitation in Inches for Year 1958

Day	April		May		June		July		August		September		October	
	Evap- oration	Precip- itation	Evap- oration	Precip- itation	Evap- oration	Precip- itation	Evap- oration	Precip- itation	Evap- oration	Precip- itation	Evap- oration	Precip- itation	Evap- oration	Precip- itation
1.....	0.00e	-	0.10	0.20	0.09	0.49	0.20	-	0.25	-	0.13	-	0.08	-
2.....	0.00e	-	0.06	-	0.06	-	0.19	-	0.28	-	0.16	-	0.08	-
3.....	0.00e	-	0.07	-	0.08	-	0.24	-	0.32	-	0.14	-	0.12	-
4.....	0.00e	0.12	0.06	-	0.12	-	0.12	0.28	0.34	-	0.14	-	0.10	-
5.....	0.00e	0.11	0.08	-	0.08	-	0.17	-	0.26	-	0.16	-	0.14	-
6.....	0.07	-	0.09	-	0.18	-	0.18	-	0.28	-	0.14	-	0.10e	-
7.....	0.09	-	0.03	-	0.21	-	0.19	-	0.20	-	0.15	-	0.13	-
8.....	0.09	-	0.09	-	0.08	-	0.10	0.20	0.25	-	0.18	-	0.14	-
9.....	0.08	0.08	0.14	-	0.09	0.06	0.00	-	0.30	-	0.29	-	0.00e	-
10.....	0.08	-	0.18	-	0.19	-	0.15	-	0.19	-	0.09	-	0.00e	0.32
11.....	0.08	-	0.10	-	0.10	-	0.20	-	0.11	-	0.19	-	0.00e	-
12.....	0.07	0.02	0.19	-	0.15	-	0.25	-	0.20	-	0.20	-	0.11	-
13.....	0.07	-	0.22	-	0.17	-	0.24	0.09	0.29	-	0.19	-	0.12	-
14.....	0.12	-	0.25	-	0.10	-	0.20	0.25	0.26	-	0.21	-	0.09	-
15.....	0.09	-	0.12	-	0.12	-	0.06	-	0.30	-	0.23	0.03	0.07	-
16.....	0.09	0.07	0.17	-	0.13	-	0.22	-	0.20	-	0.14	-	0.04	-
17.....	0.16	-	0.24	-	0.25	-	0.19	-	0.23	-	0.16	-	0.10	-
18.....	0.17	0.37	0.20	-	0.12	-	0.14	-	0.30	-	0.10	-	0.10	-
19.....	0.05	-	0.20	-	0.22	0.07	0.30	-	0.30	-	0.13	-	0.10	-
20.....	0.03	0.12	0.20	-	0.15	-	0.11	-	0.11	0.15	0.17	-	0.05	0.35
21.....	0.03	-	0.24	-	0.16	0.16	0.26	-	0.13	-	0.19	-	0.05	0.35
22.....	0.04	-	0.22	-	0.20	0.07	0.14	-	0.16	-	0.18	-	0.04	-
23.....	0.05	-	0.19	-	0.14	-	0.30	0.05	0.16	-	0.16	-	0.05	-
24.....	0.03	-	0.11	-	0.10	-	0.22	-	0.15	-	0.17	-	0.06	-
25.....	0.07	-	0.17	-	0.25	-	0.21	-	0.20	-	0.13	0.06	0.04	-
26.....	0.07	-	0.27	-	0.20e	-	0.10	-	0.29	-	0.09	-	0.04	-
27.....	0.08	-	0.15	-	0.19	-	0.20	-	0.25	-	0.07	-	0.04	-
28.....	0.12	-	0.23	-	0.26	0.06	0.20	-	0.29	0.35	0.06	-	0.04	-
29.....	0.09	-	0.17	-	0.26	-	0.26	-	0.14	0.24	0.07	-	0.06	-
30.....	0.07	-	0.20	-	0.27	-	0.17	-	0.08	0.30	0.09	-	0.04	-
31.....	-	-	0.25	-	-	-	0.18	-	0.12	-	-	-	0.06	-
Total.....	1.99	0.89	4.99	0.20	4.72	0.91	5.69	0.87	6.94	1.04	4.51	0.09	2.19	1.02

e - Estimated.

WHISKEY GAP EVAPORATION STATION

501

Location: Lat. 49° 02', long. 112° 58', in SW. 1/4 sec. 12, tp. 1, rge. 23, W. 4th Mer., Alberta, at Barnett's farm about two miles northeast of crossing of International Boundary by North Branch of Milk River. Data: Evaporation records from four-foot circular land pan set in ground. Precipitation records are also obtained by means of standard equipment. Period of Record: Mainly May to October, 1952 to date.

Daily Evaporation and Precipitation in Inches for Year 1958

Day	April		May		June		July		August		September		October	
	Evap- oration	Precip- itation	Evap- oration	Precip- itation	Evap- oration	Precip- itation	Evap- oration	Precip- itation	Evap- oration	Precip- itation	Evap- oration	Precip- itation	Evap- oration	Precip- itation
1.....		-	0.05	0.05	0.24	0.24	0.13	-	0.20	-	0.20	-	0.04	0.10
2.....		-	0.19	-	0.13	0.13	0.20	-	0.17	-	0.20	-	0.07	-
3.....		-	0.15	-	0.02	0.19	0.05	0.05	0.20	-	0.10	0.20	0.10	-
4.....		-	0.17	-	0.08	0.18	0.08	-	0.20	-	0.20	-	0.14	-
5.....		-	0.18	-	0.01	0.01	0.00	-	0.20	-	0.16	-	0.15	-
6.....		-	0.10	-	0.06	-	0.22	0.22	0.10	-	0.04	-	0.16	-
7.....		-	0.18	-	0.35	0.35	0.18	0.18	0.26	-	0.18	-	0.10	-
8.....		-	0.10	-	0.07	-	0.05	0.05	0.26	-	0.14	-	0.10	-
9.....	0.00e	-	0.15	-	0.50	0.55	0.10	-	0.19	-	0.10	-	0.02e	-
10.....		-	0.19	-	0.11	0.11	0.10	-	0.13	-	0.18	-	0.02e	-
11.....		-	0.16	-	0.07	0.07	0.15	-	0.17	-	0.15	-	0.03e	0.17
12.....		-	0.15e	0.40	0.00	0.12	0.16	-	0.17	0.17	0.13	0.03	0.08	-
13.....		-	0.15	1.00	0.03	0.03	0.19	0.29	0.13	-	0.08	-	0.10	-
14.....		-	0.10	-	0.10	-	0.04	0.24	0.29	-	0.17	0.07	0.10	-
15.....		-	0.10	-	0.06	0.06	0.08	0.08	0.14	-	0.20	-	0.10	-
16.....	0.04	-	0.15	-	0.17	0.24	0.20	-	0.20	-	0.08	-	0.07	-
17.....	0.06	-	0.18	-	0.02	0.02	0.10	-	0.14	-	0.18	-	0.09	-
18.....	0.07	-	0.14	-	0.23	0.23	0.17	-	0.20	-	0.17	-	0.07	-
19.....	0.10	-	0.20	-	0.22	0.38	0.15	0.05	0.20	-	0.15	-	0.13	-
20.....	0.16	-	0.16	-	0.10e	0.23	0.06	-	0.07	0.07	0.10	-	0.14	0.14
21.....	0.18	-	0.20	-	0.19	0.29	0.10	-	0.18	-	0.14	-	0.05e	-
22.....		-	0.17	0.07	0.07	0.07	0.20	-	0.11	0.11	0.17	-	0.10	-
23.....		0.10	0.16	-	0.16	-	0.18	0.28	0.08	0.28	0.05e	-	0.10	-
24.....		-	0.10	0.10	0.13	-	0.16	-	0.20	-	0.05e	0.25	0.05e	-
25.....		-	0.15	-	0.17	-	0.10	-	0.10	-	0.10	-	0.05e	-
26.....	0.10e	-	0.17	-	0.17	-	0.10	0.45	0.20	-	0.14	-	0.05e	-
27.....		-	0.16	-	0.13	-	0.18	0.02	0.19	-	0.06	-	0.05e	-
28.....		-	0.11	-	0.33	0.33	0.18	0.58	0.13	0.19	0.10	-	0.05e	-
29.....		-	0.10	-	0.15	-	0.06	0.06	0.10	-	0.17	-	0.10	-
30.....		-	0.16	-	0.09	-	0.19	-	0.15	-	0.10	-	0.10	-
31.....	-	-	0.05	0.05	-	-	0.10	-	0.20	-	-	-	0.08	-
Total.....	1.51	0.10	4.48	1.67	4.16	3.83	3.96	2.55	5.26	0.82	3.99	0.55	2.59	0.41

e - Estimated.

PART IV

REFERENCE LIST OF HYDROMETRIC SURVEY RECORDS

The Water Resources Papers which contain data for the whole of the Arctic and Western Hudson Bay Drainage comprise Nos. 31, 36, 40, 44, 46, 50, 54, 57, 62, 66, 68, 71, 75, 82, 84, 88, 92, 97, 101, 105, 109, 113, 117, 121 and 125, covering the period 1 October 1919 to 30 September 1958. For the Province of Manitoba only, five earlier Papers were issued, Nos. 4, 19, 22, 24 and 26, which cover the period 1 January 1912 to 30 September 1919. Reports on hydrometric surveys in Alberta and Saskatchewan for the years 1908 to 30 September 1919 were published by the Department of the Interior as Water Supply Bulletins Nos. 1 to 11. Also the earlier records covering Ontario drainage to the Winnipeg River were published in annual reports of the Hydro-Electric Power Commission of Ontario Nos. 1 to 12. While these bulletins and reports are out of print, copies are on file in the office of the Water Resources Branch at Ottawa.

Listed below are the rivers and streams in the whole of the drainage area on which have been secured records of sufficient length to allow the tabulation of mean monthly flows for several years; also the lakes on which water elevations have been recorded for an appreciable period. The river or lake to which each of the smaller listed streams is tributary is given in brackets. The opposing column lists the numbers of the Water Resources Papers in which the appertaining data are given. In some instances, although records have been secured on smaller tributaries, only the name of the larger river or watershed has been listed. Short records have been secured, or miscellaneous discharge measurements have been made, on other rivers which are not listed but concerning which data are given in Water Resources Papers; information in this respect may be obtained upon application to the Water Resources Branch.

<u>River, Lake or Creek</u>	<u>Water Resources Papers Numbers</u>
Antler (Souris)	82, 92 to 125
Arm (Qu'Appelle)	40, 44, 82, 117 to 125
Assiniboine (Red)	4 to 125
Athabasca (Slave)	31 to 125
Athabasca Lake (see Lake Athabasca)	
Avonlea Creek (Assiniboine)	97 to 113
Basswood (Rainy)	75 to 125
Bath (Bow)	31
Battle Creek Basin (Milk)	31 to 125
Battle (N. Saskatchewan)	31 to 82, 97 to 125
Bear Creek (Crane Lake)	31 to 68, 75, 82
Beaver (Oldman)	36 to 50
Beaver River Basin (Churchill)	71 to 125
Beaverhill Creek Basin	31 to 40, 46 to 68
Bell (Lake Winnipegosis)	117 to 125
Belly (Oldman)	31 to 125
Berens (Lake Winnipeg)	24, 121, 125
Berry Creek (Red Deer)	36 to 68, 75 to 113
Big Muddy Creek (Missouri)	105 to 113, 121
Big Stick Lake Basin	31 to 125
Birch (Lake Winnipegosis)	117 to 125
Birdtail Creek (Assiniboine)	4 to 24, 54, 121, 125
Blindman (Red Deer)	31 to 44
Boggy (Qu'Appelle)	97 to 125
Boundary (Waterton)	105 to 125
Bow (South Saskatchewan)	31 to 125
Boyne (Red) - see Morris River	
Brazeau (North Saskatchewan)	121, 125
Bridge Creek (Antelope Lake)	31 to 40
Brokenhead (Lake Winnipeg)	4 to 68, 92 to 125
Buffalo Pound Lake (Qu'Appelle)	87 to 125
Burntwood (Nelson)	117 to 125
Cairn Hill Spillway (Bow)	109 to 125
Cameron Creek (Waterton)	31
Canyon Creek (St. Mary)	36 to 82, 121
Carrot (Saskatchewan)	31 to 68, 117 to 125
Cascade (Bow)	31 to 125
Castle or Southfork (Oldman)	31 to 68, 105 to 125
Cedar Lake (Saskatchewan)	125
Churchill	68 to 125
Clearwater (Athabasca)	113 to 125
Clearwater (N. Saskatchewan)	31 to 68, 97 to 125
Cochrane (Reindeer)	105 to 125
Cold River (Beaver)	113 to 125
Cold Lake (Beaver)	117 to 125
Conjuring Creek (N. Saskatchewan)	46 to 68
Cooks Creek (Red)	54 to 66, 121, 125
Cottonwood Creek (Waterton)	44 to 68
Crooked Creek (Waterton)	31 to 40, 46, 109 to 125
Crooked Lake (Qu'Appelle)	87 to 125
Crowfoot (Bow)	109 to 125
Crowsnest (Oldman)	31 to 68, 105 to 125
Cutarm Creek (Qu'Appelle)	92 to 125

<u>River, Lake or Creek</u>	<u>Water Resources Papers Numbers</u>
Cypress Lake Basin (Milk)	31 to 68, 75 to 125
Cypress (Assiniboine)	121, 125
Dauphin River Basin (Lake Winnipeg)	4 to 125
Dease (Liard)	97 to 125
Dowling Lake	121, 125
Drifting (Dauphin Lake)	117 to 125
Drywood (Waterton)	31 to 68, 75 to 125
Eaglehill Creek (N. Saskatchewan)	36, 44 to 50, 75 to 92
Eagle (English)	3, 31
East Prairie (Athabasca)	36 to 68, 125
Echo Lake (Qu'Appelle)	87 to 125
Edwards (Dauphin Lake)	117 to 125
Elbow (Bow)	31 to 125
Emile (Great Slave Lake)	101 to 113
English (Winnipeg)	31 to 125
Etomami (Lake Winnipegosis)	117 to 125
Expanse Coulee (Oldman)	121, 125
Fahlman (Qu'Appelle)	113 to 125
Fairford (Dauphin)	24 to 57, 121, 125
Family Lake (Lake Winnipeg)	125
Finlay (Peace)	101 to 125
Fish Creek (Bow)	121, 125
Fishing (Mossy)	105 to 125
Flat Creek (Athabasca)	31 to 68
Fond du Lac (Slave)	101 to 125
Fork (Dauphin Lake)	117 to 125
Fortymile Creek (Bow)	31, 101, 105
Frenchman River Basin (Milk)	31 to 125
Gainsborough (Souris)	82, 92 to 125
Garland (Lake Winnipegosis)	117 to 125
Ghost (Bow)	31, 66 to 125
Gods Lake (Shamattawa)	121, 125
Gods River (Shamattawa)	75, 121, 125
Gooseberry Lake	117 to 125
Graham Creek (Souris)	82, 92 to 125
Granville Lake (Churchill)	121, 125
Grass (Nelson)	113 to 125
Great Bear Lake (MacKenzie)	75, 84, 97 to 125
Great Slave Lake (MacKenzie)	75, 84 to 125
Gull Lake (Red Deer)	84, 88, 117
Harmon or North Heart (Peace)	31, 36
Hay (Great Slave Lake)	66, 68
Hay Creek (Hay Lake)	31, 36
Hayes	75, 82, 121, 125
Heart River Basin (Athabasca)	36 to 68, 117 to 125
Highwood (Bow)	31 to 121
Hyland (Liard)	101 to 125
Icelandic River (Lake Winnipeg)	125
Ile-a-la-Crosse Lake (Churchill)	88, 92 to 121
Indianhead Creek (Qu'Appelle)	97 to 125
Island Lake (Gods River)	75, 82, 97, 121, 125
Johnstone Lake Basin	31 to 50, 75, 82, 88 to 125
Jumping Deer (Qu'Appelle)	88 to 125
Jumping Pound (Bow)	46 to 54, 62, 66, 71 to 82
Kananaskis (Bow)	31 to 125
Kaposvar Creek (Qu'Appelle)	88 to 125
Katepwa Lake (Qu'Appelle)	87 to 125
Keybrook (Assiniboine)	121, 125
Kiskatinaw (Peace)	97 to 109
Kiyu Lake	121, 125
Kneehills Creek (Red Deer)	36 to 68, 75, 82, 121, 125
Lac La Biche (Athabasca)	68 to 125
Lac La Ronge (Churchill)	92 to 121
Lac Ste. Anne (N. Saskatchewan)	71 to 125
Lac Seul (English)	3, 22, 26, 31 to 125
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A list, subdivided according to the four drainage divisions in Canada, is given below to indicate the official number and corresponding period covered by each published paper dealing with surface water supply of Canada. In the earlier years, the papers for three of the four drainages were compiled on an annual basis covering only one calendar year or one water year ending 30 September; papers for the fourth drainage, the Atlantic Drainage, were compiled biennially. Subsequently, the period covered by all papers was extended to two water years. Commencing with Paper No. 125, however, the papers for three of the four drainages again were compiled on an annual basis with the Atlantic paper remaining as a biennial publication. The years (or year) covered are shown in brackets following the paper number. Certain issues contain a summary of the mean monthly flows for the whole period of record for those rivers for which other discharge data are given; in the list below these are marked by an asterisk.

ATLANTIC DRAINAGE, INCLUDING SOUTHEASTERN QUEBEC, NEW BRUNSWICK,
NOVA SCOTIA, PRINCE EDWARD ISLAND AND NEWFOUNDLAND

Water Resources Papers Nos. 29* (1918-19 & 1919-20), 37* (1920-21 & 1921-22), 45* (1922-23 & 1923-24), 52 (1924-25 & 1925-26), 63* (1926-27 & 1927-28), 69 (1928-29 & 1929-30), 73* (1930-31 & 1931-32), 77 (1932-33 & 1933-34), 81 (1934-35 & 1935-36), 83* (1936-37 & 1937-38), 87 (1938-39 & 1939-40), 91 (1940-41 & 1941-42), 96* (1942-43 & 1943-44), 100 (1944-45 & 1945-46), 104 (1946-47 & 1947-48), 108 (1948-49 & 1949-50), 112 (1950-51 & 1951-52), 116 (1952-53 & 1953-54), 120 (1954-55 & 1955-56), 123 (1956-57 & 1957-58).

ST. LAWRENCE AND SOUTHERN HUDSON BAY DRAINAGE
IN ONTARIO AND QUEBEC

The earlier papers in this series covered the Province of Ontario only, two bilingual volumes were issued covering Quebec only, but subsequent issues included both provinces in one bilingual volume.

Ontario - Water Resources Papers Nos. 28* (1919-20), 34* (1920-21), 38* (1921-22), 42* (1922-23), 49 (1923-24 & 1924-25).

Quebec (Bilingual) - Water Resources Papers Nos. 41* (1922-23), 48* (1923-24 & 1924-25).

Ontario and Quebec (Bilingual) - Water Resources Papers Nos. 58* (1925-26 & 1926-27), 64 (1927-28 & 1928-29), 70 (1929-30 & 1930-31), 74* (1931-32 & 1932-33), 76 (1933-34 & 1934-35), 79 (1935-36 & 1936-37), 85* (1937-38 & 1938-39), 89 (1939-40 & 1940-41), 93 (1941-42 & 1942-43), 95* (1943-44 & 1944-45), 99 (1945-46 & 1946-47), 103 (1947-48 & 1948-49), 107 (1949-50 & 1950-51), 111 (1951-52 & 1952-53), 115 (1953-54 & 1954-55), 119 (1955-56 & 1956-57).

ARCTIC AND WESTERN HUDSON BAY DRAINAGE (AND MISSISSIPPI DRAINAGE IN
CANADA) IN BRITISH COLUMBIA, ALBERTA, SASKATCHEWAN, MANITOBA,
THE NORTHWEST TERRITORIES AND WESTERN ONTARIO

For the years 1908 to 1919 inclusive, reports on Hydrometric Surveys in Alberta and Saskatchewan were issued by the Department of the Interior; these reports are now out of print, but copies are on file in the offices of the Water Resources Branch. The first five Water Resources Papers for Arctic and Hudson Bay Drainage cover Manitoba only but subsequent issues cover the whole of the drainage division.

Manitoba - Water Resources Papers Nos. 4 (1912, 1913 & 1914), 19 (1915), 22 (1916), 24 (1916-17 & 1917-18), 26 (1918-19).

Whole Drainage - Water Resources Papers Nos. 31* (1919-20), 36* (1920-21), 40 (1921-22), 44 (1922-23), 46 (1923-24), 50 (1924-25), 54* (1925-26), 57 (1926-27), 62 (1927-28), 66 (1928-29), 68* (1929-30 & 1930-31), 71 (1931-32 & 1932-33), 75 (1933-34 & 1934-35), 82* (1935-36 & 1936-37), 84 (1937-38 & 1938-39), 88 (1939-40 & 1940-41), 92* (1941-42 & 1942-43), 97 (1943-44 & 1944-45), 101 (1945-46 & 1946-47), 105 (1947-48 & 1948-49), 109 (1949-50 & 1950-51), 113 (1951-52 & 1952-53), 117 (1953-54 & 1954-55), 121 (1955-56 & 1956-57), 125 (1957-58).

PACIFIC DRAINAGE IN BRITISH COLUMBIA AND YUKON TERRITORY

Water Resources Papers Nos. 1 (1911 & 1912), 8 (1913), 14 (1914), 18 (1915), 21 (1916), 23 (1916-17 & 1917-18), 25 (1918-19) out of print, 30* (1919-20), 35 (1920-21), 39 (1921-22), 43 (1922-23), 47 (1923-24), 51* (1924-25), 53 (1925-26), 59 (1926-27), 61 (1927-28), 65 (1928-29), 67* (1929-30), 72 (1930-31 & 1931-32), 78 (1932-33 & 1933-34), 80* (1934-35 & 1935-36), 86 (1936-37 & 1937-38), 90 (1938-39 & 1939-40), 94* (1940-41 & 1941-42), 98 (1942-43 & 1943-44), 102 (1944-45 & 1945-46), 106 (1946-47 & 1947-48), 110 (1948-49 & 1949-50), 114 (1950-51 & 1951-52), 118 (1952-53 & 1953-54), 122 (1954-55 & 1955-56), 124 (1956-57 & 1957-58).

* Includes summaries of mean monthly flows for period of record.

Copies of the above publications may be obtained on application to the Director, Water Resources Branch, Department of Northern Affairs and National Resources, Ottawa 4, Ontario. The price of Atlantic Drainage papers is 50 cents per copy for volume No. 104 and previous issues, and \$1.50 per copy for volume No. 108 and subsequent issues; for other drainage divisions, the price is \$1.00 per copy for volumes Nos. 97, 99 and 102 and previous issues and \$3.00 per copy for volumes Nos. 101, 103 and 106 and subsequent issues.

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